

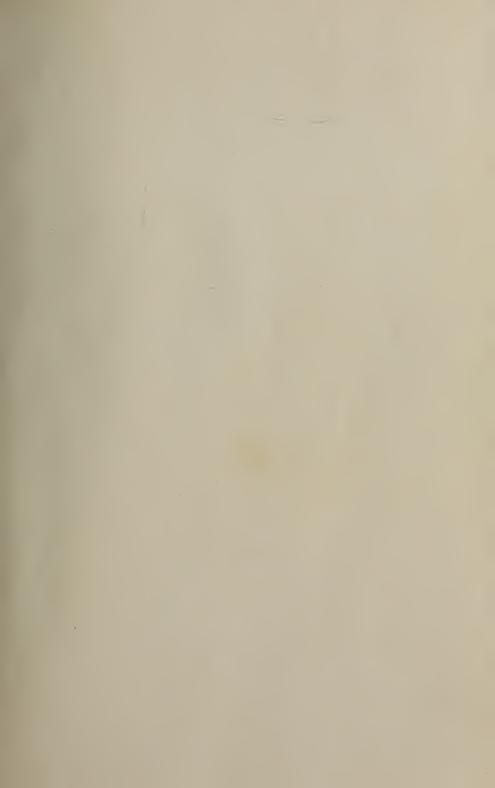
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CALENDAR OF THE FACULTY OF ARTS

EIGHTY-NINTH SESSION
1929-30

CALENDAR CHANGES

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KINGSTON, CANADA



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CALENDAR

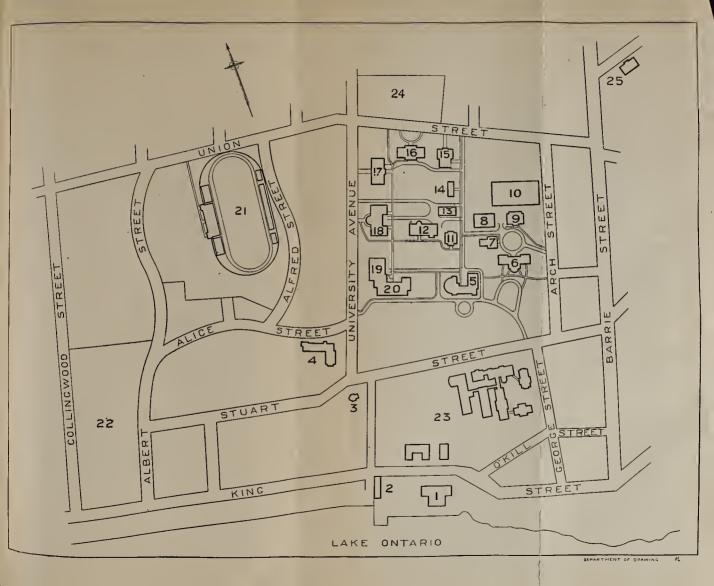
OF

THE FACULTY OF ARTS

EIGHTY-NINTH SESSION 1929-30

PRINTED FOR THE UNIVERSITY BY THE JACKSON PRESS KINGSTON 1929

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PLAN OF QUEEN'S UNIVERSITY GROUNDS

(Electrical Engineering)

- 1. Central Heating Plant
- 2. Hydraulic Laboratory
- 3. Observatory
- 4. Ban Righ Hall, Women's Residence
- Theological Hall, Biological Laboratories, Museum and Convocation Hall
- 6. Principal's Residence
- 7. Anatomy and Pharmacology Building
- 8. Gymnasium
- 9. Medical Laboratories

- 10. Jock Harty Arena11. Carruthers Hall
- (Civil Engineering)
 12. Fleming Hall
- 13. Mining Laboratory (Mill)
- 14. Mechanical Laboratory
- 15. Nicol Hall (Mining and Metallurgy)
- 16. Gordon Hall (Chemistry)
- 17. The Douglas Library and Administration Offices

- 18. Ontario Hall (Physics, Geology, and Mineralogy)
- 19. Grant Hall
- 20. Kingston Hall (Arts Building)
- 21. The George Richardson Memorial Stadium
- 22. The Leonard Field
- 23. Kingston General Hospital and Richardson Laboratories
- 24. Students' Union
- 25. Old Collegiate Building

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THE ACADEMIC YEAR*

THE EIGHTY-NINTH SESSION of the University will begin on Wednesday, September 25th, 1929, at 8 a.m. Convocation will be held on Wednesday, May 7, 1930.

1929

- May 15—Written notice due at the Registrar's Office of candidates' intention to compete for Matriculation Scholarships.
- July 3—Registration for Summer School. A fee of \$3 will be charged after this date, with additional fees if any registrations are accepted after the 4th.
- July 4-Summer School opens at 8 a.m.
- July 15—Last day for receiving applications, accompanied by fee, for September examinations, or degrees, from intra-mural and extra-mural students.
- Aug. 21—Summer School closes at 5 p.m.
- Sept. 4-Arts Supplemental examinations begin.
- Sept. 10—Last day of registration for extra-mural students without extra fee.
- Sept. 17—Last day of registration for extra-mural students with extra fee.
- Sept. 23—General registration in Arts begins.
- Sept. 24—Last day for registration of intra-mural students without extra fee.;
- Sept. 25—Classes open in Arts at 8 a.m.
- Oct. 4—Last day of registration for intra-mural students who have not previously obtained from the Faculty permission to register later.

^{*}The term "Academic Year" used in connection with Regulations and Courses of Study refers to the period extending from October 1 to September 30.

[†]The fee for late registration is \$3 on September 25, with an additional fee of \$1 for each day after that date up to October 4.

- Oct. 19—Last day upon which applications for Rhodes Scholarships will be received.
- Nov. 1—Last day for receiving applications, accompanied by fee, from extra-mural students for December examinations.
- Dec. 2—First day upon which extra-mural students may transfer to intra-mural classes.
- Dec. 13-Mid-year examinations begin.
- Dec. 21—Last day for receiving applications for the Robert Bruce Bursary.
- Dec. 20—Christmas holidays begin at 5 p.m. 1930
- Jan. 7-Classes re-open at 8 a.m.
- Jan. 15—Last day for receiving applications from candidates for the M. C. Cameron Scholarship in Gaelic.
- Feb. 15—Last day for receiving applications and fees for degrees.

 extra-mural students for the April examinations, and for degrees.
- Mar. 15—Last day for receiving applications and fees for degrees.
- April 1—Last day for receiving manuscripts for University Prizes and applications for Arts Research Scholarships.
- April 4—Class-work closes at 5 p.m.
- April 8—Examinations begin.
- April 10—Last day for extra-mural students to add classes for the Summer Session without extra fee.
- April 17—Last day for extra-mural students to add classes for the Summer Session with extra fee.
- April 18—Good Friday: a holiday.
- May 3-Statutory meeting of the Senate for awarding Standing, Medals, Honours, and Degrees.
- May 7—Convocation for conferring Degrees, announcing Honours, and distributing Prizes and Medals.

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TIME TABLE OF LECTURES

When a Science class has only one or two lecture periods a week, the class number is followed by a designation of the day or days of meeting (M=Monday, Tu=Tuesday, etc.). For hours in Geology and Mineralogy consult Cal., pp. 156-162.

Sat, at	11		7	21, Tu, Th	2, Tu 121, 7	25a, 23b 39	28	27, 40	1(B)15,Tu 18, Tu, Th		26a, 42b	1, 4, 25 30a, 31b	1	,	7b		2	1 17b, Tu, Th 21a
., Thur. and	10	-,		2, Tu, Th 11, Tu	71, Tu, Th 141, Tu, Th	5b, 12a	17a, 20b	2(B), 30b, 35a	10, Tu	B, 25a, 26b	1, 60	20a, 21b				1 Tu, 11,Th 2, Th	29	10b,Tu,Th 14a,Tu,Th
Classes held on Tues., Thur. and Sat. at	6		work.	1, Tu, Th 13, Tu, Th	41, Tu, Th	4	2(B), 22a 24b	1(B), 14	13, Tu, Th	1, 24b	A	16, 18a, 19b		99	13 a		25	
Classes	00		outlines of	18, Tu, Th	145, Sat.		.					2			2,15a,16b			
ri. at	11		See	22a, W 23b, W 33, M, W	21, W, F 61, M, F 101b, M, F 171a, M, F		35a, 36b	10, 12	1 (A)	11a	35a	3, 14a, 15b	1 1	330, 41a, 45b	10a, 11b	12, W, F 13, W, F	44	16a, 20b
Wed. and F	10			10, M, F 24,	145, M	10	18 45a, 46b	2(A), 8	15, M, Th 19W	2	2, 46b	13		1, 30a 100		M, F	27	12a, W, F 13b, W F
Classes held on Mon., Wed. and Fri. at	G	10a, W, F 12b, W, F		12, M, W 15a, M, W	35, M, W	16a, 32 24b	2(A), 10a 14b	1(A)	2		18b	12		32a, 40a 48b, 51b	Ast. 1 17b, 18a		1	
Classes he	00			20, M, W		1				12b					1,1h,12a,14b 20b	2 F		11a, M, W
Classes held on Mon, Wed. and Fri. at Classes held on Tue		Bacteriology	Biblical Lit	Biology	Chemistry	Economics	English	French	Geology	German	Greek	History	Italian	Latin	Mathematics	Mineralogy	Philosophy	Physics

TIME TABLE OF LABORATORY WORK

The numbers in narentheses indicate the hours; an asterisk indicates another section on Saturday. 9-12.

	Mon. Tues. Wed. Thur. Fri.	Tues.	Wed.	Thur.	Fri.
Bacteriology		10a (1-3) 12b (1-3)		10a (1-3) 12b (1-3)	
Biology	1 (Sec. A, 1-4) 2 (1-4) 11 (2-4) 18 (1-4)	20 (2-5) 22a (2-4) 23b (2-4)	1 (Sec. B, 1-4) 12 (1-4)	13 (2-5) 14 hf.(2-4) 22a (2-4) 23b (2-4)	10 (1-4) 11 (2-4) 21 (2-4) 33 (1-4)
Chemistry	61(Sec. A, 1-4) 11. (1-4) 106b (1-4) 171a (1-4)	41 (Sec. A, 1-4)	2 (1-4) 3 (Sec. A, 1-5) 21 (1-4) 35(Sec. A, 1-4) 41(Sec. B, 1-4) 101b (1-4) 121 (1-4)	3 (Sec. B, 1-5) 35 (Sec. B, 1-5) 36 (Sec. B, 1-4) 61 (Sec. B, 1-4) 145 (1-4)	35 (Sec. C, 1-4)
Geology	14 (2-4)		10 (2-4)		
Mineralogy		11 (1-3)			1 (2-4) 12 (1-3) 13 (1-3)
Physics	17b (Sec. A, 2-4)	1 (Sec. A, 1-3 or 3-5) 11a (3-5) 12a (3-5) 13b (3-5)	1 (Sec. A, 1-3 or 3-5) 11a (3-5) 12a (3-5) 12b (3-5) 13b (3-5)	2 (Sec. B, 3-5) 10b, (3-5) 14a (3-5)	

HISTORY OF THE UNIVERSITY

Queen's University owes its origin to the desire of the Synod of the Presbyterian Church in Canada, in connection with the Church of Scotland, for a ministry trained within the country. As early as 1832 the Provincial Government had been petitioned "to endow without delay an institution, or professorships, for the education and training of young men for the ministry in connection with the Synod." This and other representations failing of their object, steps were taken by the Synod to found a college at Kingston on the lines of the Scottish National Universities. On October 16, 1841, a Royal Charter was issued by Her Majesty Queen Victoria for the establishment of Queen's College, Kingston, and the first classes were opened in March, 1842, with the Rev. Dr. Liddell as Principal. Funds were provided in part by grants from the Presbyterian Church in Scotland and from the Canadian Government, and in part by liberal subscriptions from the friends of the young and growing University. In 1867-68, however, the withdrawal of the Provincial grant, and the failure of the Commercial Bank, almost brought financial disaster. But the crisis was met by the determination of Principal Snodgrass and of other self-denying workers, chief among whom was Professor Mackerras. The country was canvassed for subscriptions, and as a result of the widespread interest aroused, \$113,000 was added to the endowment.

In 1877 Principal Snodgrass was succeeded by the Rev. G. M. Grant, who for a quarter of a century built with brilliant success upon the foundation laid by his predecessors. Under him the University gained rapidly in size and prestige. By 1881 Queen's had a new building, an enlarged staff, and a great increase of students. In 1887, as the result of an effort in commemoration of the Queen's Jubilee, \$250,000 was raised, resulting in further extension, and in the establishment of new professorships.

Principal Grant died in 1902, and was succeeded in the following year by the Very Rev. D. M. Gordon. In 1916, owing to ill-health, Principal Gordon resigned his position, but continued in office until the autumn of 1917, when Rev. R. Bruce Taylor, M.A., D.D., LL.D., was appointed as his successor.

In 1854 the Medical Faculty of Queen's was established. It was re-organized in 1865 as the Royal College of Physicians and Surgeons

in affiliation with the University, but in 1891 the original status was resumed. Excellent facilities for clinical work are provided in the General Hospital, Hotel Dieu, Ontario Hospital.

Queen's led the way in co-education. As early as 1870 special classes in English and other subjects were formed for women, but Courses leading to a degree were not thrown open to them until 1878-79. In 1880 co-education was extended to the medical course, and in 1883 a separate Women's Medical College was opened and affiliated with Queen's. It was closed, however, in 1894, as similar facilities were offered in Toronto and elsewhere.

The School of Mining was founded in 1893 under an Ontario Charter. For several sessions all its departments were housed in Carruthers Science Hall, which had been erected in 1891, but in view of the rapid growth of the School the Provincial Legislature in 1900 provided for its accommodation two large buildings, Ontario Hall for the Departments of Physics, Geology and Mineralogy and Fleming Hall for the Departments of Civil, Mechanical and Electrical Engineering. More recently the Provincial Government erected Gordon Hall, which is entirely used for the teaching of Chemistry, and, through the generosity of Professor Nicol and other graduates, Nicol Hall has been built to provide class rooms and laboratories for the Department of Mining and Metallurgy. The School of Mining, which since 1893 had been under the control of a separate Board, was in 1916 amalgamated with the University, and now constitutes its Faculty of Applied Science.

In 1907 the Ontario Government established at Queen's a Faculty of Education for the purpose of providing professional training for teachers in the secondary schools of the Province. In 1920, however, the work of the Faculty was discontinued because of the decision of the Government to extend the scope of the Normal Schools and to create in Toronto the Ontario College for Teachers.

There is now on the University Campus a stately group of buildings, comprising the Old Arts Building (now the Theological Building); Carruthers Hall (Civil Engineering); Kingston Hall (New Arts), the gift of the city of Kingston; Grant Hall, erected by students, graduates, and friends in honour of Principal Grant; Ontario Hall (Physics, Geology, and Mineralogy); Fleming Hall (Mechanical and Electrical Engineering); Gordon Hall (Chemistry); Nicol Hall (Metallurgy); the Medical Building (Anatomy and Pharmacology); the Medical Laboratories Building; the Gymnasium; the Observatory; the Douglas Library, named in memory of Dr. James Douglas, a former chancellor of the University. who contributed \$150,000 to its cost; Ban Righ Hall, the new residence for women, erected through the efforts of the Alumnae Association, and

the Richardson Pathological Laboratory. The Province of Ontario besides its generous gifts of Ontario, Fleming, and Gordon Halls, referred to in an earlier paragraph, contributed \$150,000 to the Douglas Library and \$125,000 to the new Central Heating and Power Plant.

Queen's University, though founded by a Church, was dedicated to the nation. As its constituency expanded, its constitution was gradually broadened, until finally in 1912, as the result of an amicable arrangement between the Presbyterian Church and the Trustees of the University, an act was passed by the Dominion Parliament removing the last vestige of denominational control.

The endowment of the University is at present about \$2,250,000, of which about \$900,000 was obtained in 1918-19. To this sum the late Chancellor Dr. Douglas contributed \$500,000 and the Carnegie Corporation \$250,000. In recent years the Province of Ontario has steadily increased its grants, and the annual income of the University, derived from all sources, is now over \$500,000. The registration of students has grown from 665 in 1900 to over 3,500 in the present session, and Queen's has become nation-wide in its work and influence.

GOVERNMENT AND ADMINISTRATION

The administration of the University is vested in the Board of Trustees, the University Council, the Senate, and the Faculty Boards.

THE BOARD OF TRUSTEES

The Board of Trustees consists of ex-officio and elective members. The former are the Chancellor, the Principal, and the Rector. The latter consist of (1) one representative from each affiliated college, (2) representatives as provided for by the Statutes from (a) the University Council, (b) the Benefactors, (c) the Graduates, and (3) members elected by the Board of Trustees.

The functions of the Board of Trustees are to manage the finances, to possess and care for the property, to procure legislation, to appoint instructors and other officers, and in general to attend to such external matters as do not relate directly to instruction.

THE UNIVERSITY COUNCIL

The University Council consists of the Chancellor, the Trustees, the members of the Senate, and an equal number of members elected by the Graduates from their own members.

The annual meeting of the Council is held on the Tuesday immediately preceding Convocation.

The Functions of the Council are:

- (1) To elect the Chancellor, except when two or more candidates are nominated, in which case the election is by registered graduates.
 - (2) To elect six trustees, two of whom shall retire annually.
- (3) To make by-laws governing the elections of (a) the Rector by the registered students, (b) four trustees by the benefactors, (c) six trustees by the University Council, (d) six trustees by the graduates.
- (4) To discuss all questions relating to the University and its welfare.
- (5) To make representation of its views to the Senate or the Board of Trustees.
 - (6) To decide on proposals for affiliation.
- (7) To arrange all matters pertaining to (a) its own meetings and business, (b) the meetings and proceedings of Convocation, (c) the installation of the Chancellor, (d) the fees for membership, registration and voting.

THE SENATE

The Senate consists of:

The Principal.

The Principal of Queen's Theological College.

The Dean of the Faculty of Arts.

The Dean of the Faculty of Medicine.

The Dean of the Faculty of Applied Science.

Three Professors elected by the Faculty of Arts.

Three Professors elected by the Faculty of Applied Science.

Three Professors elected by the Faculty of Medicine.

Two Professors elected by the Faculty of Queen's Theological College.

The Functions of the Senate are:

- (1) To determine all matters of an academic character which concern the University as a whole.
- (2) To consider and determine all courses of study leading to a degree, including conditions of Matriculation, on recommendation of the respective Faculty Boards; but the Senate shall not embody any changes without having previously presented these to the Faculty.
- (3) To recommend to the Board of Trustees the establishment of any additional Faculty, Department, Chair, or Course of Instruction in the University.
- (4) To be the medium of communication between the Alma Mater Society and the Governing Bodies.
- (5) To determine all regulations regarding the social functions of the students within the University, and regarding the University Library and University Reading Rooms.
 - (6) To publish the University Calendars.
 - (7) To conduct Examinations.
 - (8) To grant Degrees.
 - (9) To award University Scholarships, Medals, and Prizes.
- (10) To enforce the Statutes, Rules, and Ordinances of the University.
- (11) And generally, to make such recommendations to the Governing Boards as may be deemed expedient for promoting the interests of the University.

THE FACULTY BOARDS

The Faculty Boards are constituted as follows:

For the Faculty of Arts and for the Faculty of Applied Science, the Dean, Professors, Associate Professors, Assistant Professors, and Lecturers of each Faculty have power to meet as separate boards, and to administer the affairs of each Faculty under such regulations as the Board of Trustee may prescribe.

For the Faculty of Medicine, the Dean, Professors, Associate Professors, and Assistant Professors have power to meet as a separate board, and to administer the affairs of the Faculty under such regulations as the Board of Trustees may prescribe.

The Principal is ex-officio president and a member of each of the Faculty Boards. In his absence the Dean of the Faculty shall preside.

The Functions of the Faculty Boards are:

- (1) To recommend to the Senate courses of study leading to a degree, and the conditions of admission.
- (2) To decide upon applications for admission or for change of course, subject to the regulations of the Senate.
- (3) To submit to the Senate names for both ordinary and honorary degrees.
- (4) To arrange the time-table for classes and to edit the Faculty Calendar, subject to the approval of the Senate.
- (5) To control registration, and determine the amount of fees and manner of payment, subject to the regulations of the Senate and the approval of the Board of Trustees.
 - (6) To deal with class failures.
 - (7) To exercise academic supervision over students.
- (8) To make such recommendations to the Senate as may be deemed expedient for promoting the efficiency of the University.
 - (9) To award Faculty Scholarships, Medals, and Prizes.
- (10) To appoint within the limits of the funds made available by the Trustees such sessional assistants, fellows, tutors, and demonstrators as shall be needed to give instruction in the subjects taught by the Faculty.
- (11) To pass such regulations and by-laws as may be necessary for the exercise of the functions of the Faculty.

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F. H. WALTER, M.A. (McGill), Docteur de l'Université de Paris, Assistant Professor of French,

Belvidere Annex.

C. A. Curtis, B.A. (Toronto), Ph.D. (Chicago),
Assistant Professor of Economics,

308 University Avenue.

HILDA C. LAIRD, B.A. (Queen's),

Dean of Women and Lecturer in German,

Ban Righ Hall

F. A. KNOX, B.A. (Queen's),

Assistant Professor in Economics,

207 L. William Street.

MARY L. MACDONNELL, M.A. (Queen's),

Lecturer in Latin,

104 Queen's Crescent.

H. Brown, M.A. (Toronto),

Lecturer in French,

192 Frontenac Street.

L. E. LAW, B.A. (London and Oxford), Lecturer in Classics,

32 Sydenham Street.

H. F. SUTHERLAND, M.A. (Glasgow), B.A. (Oxford), Lecturer in Politics,

310 University Avenue.

M. K. INMAN, M.A. (Oxford, Harv.), Lecturer in Economics,

486 Johnson Street.

J. P. PRITCHETT, M.A. (Stanford),

Lecturer in United St

Lecturer in United States History,

371 Princess Street.

D. A. COOPER, B.A. (Queen's),

Lecturer in Mathematics,

Queen's University

K. THOMSON, M.A. (Western),

Lecturer in Physics

Queen's University.

H. C. WHITE, B.A. (Queen's),

Lecturer in Biology,

184 Stuart Street.

R. W. CUMBERLAND, B.A. (Queen's),

(Half time) Lecturer in English,

587 Johnson Street.

III.—OTHER INSTRUCTORS

E. FLAMMER, B.Sc. (Calif.), Ph.D. (Harvard),

Associate Professor of Physics,

68 Collingwood Street

B. Rose, B.Sc. (Queen's), Ph.D. (Yale),

Associate Professor of Geology,

208 Albert Street

A. F. G. CADENHEAD, B.A. (Queen's), Lecturer in Chemistry,

72 Queen's Crescent.

R. L. DORRANCE, B.A. (Toronto), Lecturer in Chemistry,

233 Johnston Street.

W. V. BALL, B.A., Sc., M.A. (Toronto), Lecturer in Physics,

120 College Street.

MRS. ETTA NEWLANDS, M.A. (Queen's),

Instructor in Mathematics,

25 Concession Road.

J. BEWS,

Physical Instructor for Men,

College Street

EDNA CHOWN,

Physical Instructor for Women,

138 Lower Albert Street.

JEANNE M. MCCONNELL, B.S., C.A.P., Instructor in French,

31 Ellerbeck Avenue.

CAROLINE E. MCNEILL, M.A.,

Instructor in Spanish and Italian,

Queen's Crescent.

FLORENCE BARRINGTON,

Teaching Fellow in Latin,

W. H. ZINN,

Demonstrator in Physics,

TUTORS

Tutors in Latin: Mary White, Ruth L. Shaver, Florence R. Rothwell.

Tutor in German: K. G. Morgenroth.

Tutor in French: Mary Rayson.

Tutors in Spanish: Verlie D. Williamson, Isabel Davidson.

Tutors in English: Agnes Prittie, Mrs. C. B. File, Verna McClure, H. A. Tanser, R. O. Staples, Mrs. V. Des Brisay, F. Rand, Jean Royce, Maud B. Whattam.

Tutors in History: Maude Whattam, D. R. Falconer.

Tutors in Economics: J. L. McLennan, A. S. Haydon, J. C. Cameron.

Tutor in Philosophy: Allan Baker.

Tutors in Mathematics: W. J. Morrison, R. E. Dimma, Mary VanDusen, W. L. Hudson, J. D. Stewart, D. I. Matheson, K. M. MacEwen, F. D. Sturm, Mrs. N. Miller.

Tutors in Chemistry: F. Jolliffe, M. J. Armstrong, D. F. McRae, W. M. Heron, W. E. Barker, F. Hamill, H. J. Code, M. C. McNab, Alwilda Martin, O. Rogers, G. Hern, J. W. McCutcheon, P. L. MacLachlan.

Tutor in Physics: W. J. Morrison.

Tutor in Biology: Wallace Fox, Mildred Nobles, Doris N. Head.

OTHER OFFICERS

Librarian

E. C. KYTE

Curators of the Library

PRINCIPAL TAYLOR, PRINCIPAL KENT, DEAN CLARK, DEAN CONNELL,
DEAN MATHESON, W. E. MCNEILL, PROFESSORS TROTTER, ALEXANDER
MACPHAIL, JAMES MILLER, AND MICKLEM

Curators of the Museums

THE PROFESSORS OF BIOLOGY AND GEOLOGY

The Observatory Board

THE PRINCIPAL AND THE PROFESSOR OF ASTRONOMY

Director of the Summer School
PROFESSOR MACCLEMENT

Director of Extension Work

A. H. CARR, C.A. (Alberta), B.A. (Queen's)

Superintendent of Buildings

JAMES BEWS

Secretary-Treasurer Athletic Board of Control
J. S. McDonell, B.A. (Queen's)

EQUIPMENT AND SPECIAL FACILITIES

THE LIBRARY

The University Library was removed from the Old Arts building to the new Douglas Library building during the summer of 1924. The new building provides one large reading room, three smaller ones, a number of conference rooms, exhibition room and offices for the library and administrative staff.

In the main reading room will be found a collection of some 5,000 volumes of general reference works on open shelves. The main collection, shelved on five tiers of book-stacks, occupies the centre of the building. The general library now includes about 150,000 volumes as well as many original manuscripts and prints.

The system of classification used is that of the Library of Congress.

Seven hundred and fifty journals and other serials are currently received.

In addition to the general library there are departmental libraries for physics; chemistry; mining and metallurgy; geology and mineralogy; civil, mechanical and electrical engineering.

The library of the Medical Faculty, now in the Douglas Library building, has its own reading room, and is administered by the staff of the general library.

The Lorne Pierce Collection of Canadian Literature is very rich in first editions, original manuscripts and rare Canadiana.

The Shortt-Haydon Collection of portraits and views relating to Canada is one of the finest collections of its kind in existence.

THE MUSEUMS

The Biological and Ethnological Museum on the first floor of Theological Hall, has a large Botanical collection illustrating fully the flora of North America, Europe, Asia, South Africa, and Australia; a Zoological collection representing the Canadian fauna by a large number of prepared specimens of mammals, birds, reptiles, fishes, insects, and mollusca; and an Ethnological collection of weapons, utensils, dresses, and ornaments.

The Geological and Mineralogical Museum, which is situated on the ground floor of Ontario Hall, has a large collection of minerals, ores, rocks, and fossils, arranged to illustrate most of the subjects treated in the lectures.

THE LABORATORIES

The Biological laboratories are in Theological Hall, and are provided with material for dissection and with microscopes and other instruments.

The Chemical laboratories are in Gordon Hall. On the third floor are two laboratories for General Chemistry, one for Medical Chemistry, and one for Electro-Analysis. On the second floor are two for Quantitative Analysis, one for Organic Chemistry, one for Food and Water Analysis, and one (not yet equipped) for whatever future development demands. On the first floor are three for Qualitative Analysis, one for Industrial Chemistry, one for Physical Chemistry, one for Gas Analysis, one for Spectroscopy, and one dark room for Photography. Besides these there are small separate laboratories for research work.

The Physical laboratories are in the southern half of Ontario Hall. Two of the large rooms on the first floor are devoted to the more elementary laboratory work of the first and second years and a commodious room on the second floor is arranged as an electrical laboratory for advanced work. Various smaller rooms are fitted for special purposes. One of them is for work in Physical Optics—Spectrometry, Polarimetry, and Spectroscopy. Another is well equipped as a dark room for Photography. A third is arranged for X-ray and photometric work. Other rooms are used as private laboratories.

THE OBSERVATORY

The Observatory has a transit room, a computing room, and an equatorial room with revolving dome. The equatorial telescope has a six-inch objective, declination and right ascension circles, and a driving clock. The transit has a three and a half inch objective. The further equipment consists chiefly of a striding level, a chronograph, a mean time clock, and a sidereal time clock.

FACILITIES FOR FIELD WORK

Geology and Mineralogy. In the vicinity of Kingston a greater variety of economic minerals and metalliferous ores is mined than in any similar area in Canada. Through the kindness of the managers the various mines may be visited by the Geology and Mineralogy classes, and students may thus obtain valuable information concerning field conditions.

Botany. The great diversity of land surface in the vicinity of Kingston enables the students of Botany readily to make field studies of the various plant associations. Within two miles of the city limits are extensive reed marshes, bordered by water gardens well stocked with the swimming and submerged societies of plants. A drive of eight miles permits the study of an excellent example of sphagnum moor, with all the plants of our latitude characteristic of muskeg conditions. An hour's drive in another direction reaches a region of high, dry, granite hills where xerophytic modifications dominate the flora. A carefully preserved mesophytic meadow with a forest plantation is within walking distance of the University.

FACILITIES FOR ATHLETICS

The University provides ample facilities for athletics. An excellent gymnasium, equipped with shower-baths, large swimming pool, running track, and all apparatus for physical training, stands in the University grounds. Beside the gymnasium is a large covered skating rink with artificial ice. A block from the University is the football field, with the George Richardson Memorial Stadium given by Mr. James Richardson in memory of his brother, Captain George Richardson, a Queen's graduate and a former athlete, who was killed in the Great War. There is room and equipment for all students who wish to take part in football, hockey, basketball, tennis, track athletics, swimming, boxing, fencing, or wrestling.

GENERAL INFORMATION

DEGREES

By the Royal Charter granted to Queen's College, it is "willed, ordained, and granted that the said College shall be deemed and taken to be an University, and that the students in the said College shall have liberty and faculty of taking the degree of Bachelor, Master, and Doctor in the several Arts and Faculties."

The degrees at present conferred under the statutes of the University are as follows:

I.—HONORARY DEGREES

Doctor of Divinity, D.D.; Doctor of Laws, LL.D.

II.—DEGREES BY EXAMINATION

1.-In Arts

Bachelor of Arts, B.A.; Bachelor of Commerce, B.Com.; Master of Arts, M.A.; Doctor of Philosophy, Ph.D.

2.-In Theology

Bachelor of Divinity, B.D.

3.-In Medicine

Doctor of Medicine, M.D.; Master of Surgery, C.M.; Diploma of Public Health, D.P.H.; Doctor of Science, D.Sc.

4.-In Applied Science

Bachelor of Science, B.Sc.; Master of Science, M.Sc.

HOODS

Each Degree has its distinctive hood, as follows:

B.A.—Black, bordered with red silk.

B.Com.—Black, bordered with green silk.

M.A.—Scarlet.

B.D.—White, bordered with crimson plush.

M.D. and C.M.—Scarlet, bordered with white.

B.Sc.—Black, bordered with yellow (old gold) silk.

M.Sc.—Black, lined with yellow, bordered with yellow.

D.Sc.—Yellow silk, bordered with black.

D.D.—Black silk, lined with white silk.

LL.D.—Black silk, lined with blue silk, bordered with blue.

Ph.D.—Black silk, lined with purple, bordered with white.

INFORMATION FOR WOMEN STUDENTS

Women students may receive information and advice regarding any matter pertaining to their life at Queen's from the Dean of Women. The Dean should be consulted about the planning of courses and should be notified concerning cases of illness.

During the session the Dean may be consulted at her office in Kingston Hall or at Ban Righ Hall. She may always be reached by correspondence addressed to her at the University.

Residences and Boarding-houses

The Women's Residence, Ban Righ Hall, and its two annexes together accommodate one hundred students. Applications for rooms in the Residence and requests for further information regarding it should be sent to the Dean of Women.

The Dean will be glad to furnish women students who are not able to live in the Residence with a list of approved boarding houses where suitable accommodation may be obtained. Women students are not permitted to lodge in houses in which men are lodging.

Academic Dress

Women students are expected to wear academic gowns at lectures in the New Arts Building. These gowns may be ordered in Kingston after the opening of the session or they may be made from patterns supplied by the Look-out Committee, Queen's University. Patterns may also be secured through the office of the Dean of Women.

Gymnasium Costume

The correct gymnasium costume for women students consists of a navy blue tunic with blue girdle, close-fitting black knickers, white sport shirt, black stockings and white gymnasium shoes (Oxfords). This costume should be bought after coming to the University. The cost of the outfit, without shoes and stockings, is \$6.35.

EXPENSES

At the present time the average student pays for table board from \$5.00 to \$6.00 a week, and for room from \$2.50 to \$3.50 a week.

See FEES for other expenses.

Lists of Boarding Houses for men students may be obtained from the Registrar. Meals may be obtained at the cafeteria in the Students' Union.

EXTENSION LECTURES

Members of the staff are prepared to lecture at outside points on a great variety of subjects. The lectures are specially suitable for University extension work, for courses of study planned by various organizations, and for teachers' conventions. A complete programme of lectures and full information on any point connected with them will be supplied upon application to the Registrar, Queen's University.

PHYSICAL WELFARE OF STUDENTS

Every student is required upon registration to contribute \$4 towards a health insurance fund which the University will use to provide medical care for those who are ill. Details of the plan will be available at registration.

All students in their first year are required to take physical training for two hours a week, unless excused on account of military training with the Officers' Training Corps. They are examined by the University physician, who prescribes proper exercises to correct physical defects.

ATTENDANCE AT CHURCH

All students are expected to attend a church of the denomination to which they belong.

During the session, Sunday services are conducted in the University by representatives of different denominations who are invited to preach to the students, professors, and visitors.

STUDENT SELF-GOVERNMENT

Queen's was the first University in Canada to introduce student self-government. All students are members of the Alma Mater Society, the chief instrument of student government, and are expected to share in its duties and responsibilities.

THE OFFICERS' TRAINING CORPS

The Queen's Contingent was formed at the outbreak of the Great War under Lieutenant-Colonel A. B. Cunningham, and was formally organized February 1, 1915. It now consists of two companies under the command of Colonel P. G. C. Campbell. The course of training, which begins in November, leads up to Certificate A, qualifying for the rank of Lieutenant, and Certificate B, qualifying for the rank of Captain in the Canadian Militia. Students who enroll in their first year and attend the full number of parades are excused from physical training.

REGISTRATION

All students are required at the beginning of each session to have their names entered upon the University Register.

Intra-mural students must register in person, paying full fees for the session. Those registering before the opening of the session will be charged the regular fee, but those registering on or after the first day of session will be charged an extra fee of \$3. In addition, those who have not previously obtained permission to defer registration must pay a special late fee of \$1 a day from September 26 to October 4. No student may register after October 4 unless he has obtained special permission before the opening of session.

For Extra-mural registration see REGULATIONS REGARDING EXTRA-MURAL WORK.

ADMISSION TO THE FACULTY OF ARTS

1. Candidates desiring to enter the Faculty of Arts should make application during the summer on forms supplied by the Registrar.

The application should be accompanied by matriculation or other certificates.* These will be returned when the candidate's standing is determined.

I.—ADMISSION BY MATRICULATION

- 2. Matriculation examinations are conducted for the Universities of Ontario by the University Matriculation Board. Details regarding these examinations may be found in a separate publication entitled REQUIREMENTS FOR MATRICULATION. This also contains a list of the Matriculation Scholarships and the conditions of award.
- 3. The Matriculation examinations are of two grades, elementary and advanced, called respectively Pass and Honour Matriculation.

A. Pass Matriculation

4. The subjects of Pass Matriculation are as follows: Latin, English, Canadian and Ancient History (with Music as an option for Ancient History), Mathematics, and any two of the following: Greek, German, French, Spanish or Italian, Experimental Science (Physics and Chemistry) or Agriculture.

Two papers are set in each of the six subjects and the pass standard is fifty per cent. in each paper.

5. A candidate who presents a certificate of Pass Matriculation will be admitted to the first year in Arts and may expect to graduate in four years.

^{*}Candidates holding certificates from the Department of Education of Ontario should send their certificates to the Registrar, Queen's University, in order to have standing allowed. Candidates holding certificates from Departments of Education outside of Ontario should write to the Departments concerned asking that their marks be sent to the Registrar, who will then advise regarding the standing allowed.

B. Honour Matriculation

6. Honour Matriculation examinations are held in the following subjects:

Latin (two papers), English (two papers), Modern History (one paper), Mathematics (Algebra, Geometry, Trigonometry, and Problems, one paper in each), Greek (two papers), German (two papers), French (two papers), Spanish (two papers), Physics (one paper), Chemistry (one paper), Biology (one paper in each of Zoology and Botany).

The pass standard is fifty per cent. in each paper.

- 7. Subject to the modifications in sections (a) and (b) a candidate who enters with Honour Matriculation credits will on payment of the pro tanto fee be allowed all subjects up to five in which he has made fifty per cent. on each paper.
- (a) Only a pro tanto allowance will be given in Physics 1, Chemistry 1, Biology 1 to students proceeding to course 2 in these subjects. The Departments concerned will grant exemption from all of part of the first year in these classes on presentation of evidence regarding the work previously covered. Ordinarily, however, the only exemption is from class attendance and the student must do the laboratory work and pass the examinations, though at the same time he may take course 2.
- (b) Mathematics 1 may be granted on any two papers of Upper School Mathematics to a candidate who will not proceed to higher work in that subject, or take Physics 2 or Chemistry 41.
- 8. A candidate with Honour Matriculation in four or five subjects may expect to graduate in three years if he is on a Pass Course.
- 9. Students who are subject to the requirements of 7 (a) will be allowed to register for five other courses in a year.
- 10. Students who desire credit towards a degree on work done outside of the University must pay a pro tanto fee of ten dollars.

II.—ADMISSION BY EQUIVALENT EXAMINATION

A.—Examinations Equivalent to Pass Matriculation

11. The following certificates are accepted for Pass Matriculation in the subjects which they cover provided that 50% has been made in each paper.

Alberta	Third Year High School.
British Columbia	Grade XI.
Manitoba	Grade XI.
New Brunswick	First Class License.
Newfoundland	
Nova Scotia	Grade XI (average 60, minimum
	50).
Ontario	Entrance to Normal School.
Prince Edward Island	Honour Diploma or First Class Li-
	cense or Second Year Certificate
	from Prince of Wales College.
	The University School Leaving.
Quebec	
	Second Class, Third Form High
	School.

B. Examinations Equivalent to Honour Matriculation

12. The following certificates are accepted for Honour Matriculation in the subjects in which at least fifty per cent. has been made in each paper.

Alberta	Fourth Year High School.
British Columbia	Grade XII.
Manitoba	First Class.
New Brunswick	Grammar School.
Newfoundland	Associate Grade.
Nova Scotia	Grade XII.
Ontario	Upper School.
Prince Edward Island	Honour Diploma of Third Year,
	Prince of Wales College.
Saskatchewan	First Class, Fourth Form High
	School

III.—ADMISSION BY SPECIAL REGULATION

13. In the case of students who present certificates showing that they are over the age of twenty-one, the Senate may postpone the Matriculation examination. Except by special permission of the Senate and upon recommendation of the Faculty of Medicine or of Applied Science, such unmatriculated students will not be admitted to the first year in Arts for the purpose of proceeding to a course in Medicine or Science.

14. A candidate admitted under Regulation 13 must, with the exceptions noted below, obtain credit in course 1 of the subjects in which he lacks matriculation in order to remove his entrance condition. In the case of Latin, French, and Mathematics, however, he must within two years pass the regular matriculation examinations. Preparatory classes in these subjects, if offered, carry no credit and do not admit to course 1.

REGULATIONS REGARDING EXTRA-MURAL WORK

All inquiries regarding regulations should be addressed to the Registrar.

In order to meet the needs of students who are unable to do all their work in residence, of teachers in actual service who wish to improve their professional qualifications in certain subjects, and of those persons in general who, though unable to attend the regular classes, are yet desirous of pursuing particular studies under competent direction, the University conducts a system of extra-mural instruction. This work is as nearly as possible identical with that taken up by the intra-mural students and the same examinations are set for all. Candidates who fulfil at least the minimum requirements of residence and otherwise comply with the conditions stated below may qualify for the various degrees to which their Courses lead.

For details of the work offered for the summer of 1929 and winter 1929-30 see page 46.

Conditions of Admission to Extra-mural Work

- 1. In order to register for the first time extra-mural students must be twenty-one years of age and residents of Canada. Students residing outside of Canada, however, who have attended the University for one session or who have taken work extra-murally for one session are allowed to complete their Course.
- 2. Fully matriculated students under twenty-one years of age may be allowed to register on satisfying the Faculty that they are unable to attend the University until a later date.

A student over twenty-one years of age who is not a candidate for a degree or diploma may register without matriculation standing in any course in which he desires to improve his scholarship, provided that he can satisfy the Board of Studies of his ability to proceed with the work desired.

- 3. Except with the permission of the Board of Studies, no one is permitted to take work at Queen's in the same year as he is taking work at any other educational institution or writing on any outside examination other than Pass Matriculation.
- 4. An intra-mural student may become an extra-mural student only by special permission of the Faculty. A student registered intra-murally

in the winter session will not be allowed to continue his course extramurally in the following summer, unless by special permission he has been allowed to postpone one or two courses until the summer. In such case, however, he must attend the Summer School. But any student may, in preparation for the September Supplemental examinations, register for instruction in courses in which he failed in the sessional examinations of the previous December or April, if they are offered extramurally in the summer.

Registration in Extra-mural Courses

- 5. Application for registration must be made on forms supplied by the Registrar, and must satisfy the conditions stated in section 6. They must reach the University by the dates mentioned in section 7; and they must be accompanied by the fees specified in section 8.
- 6. (a) An extra-mural student may not register for more than four courses in the academic year. He may register in the winter (September-April) for as many as two courses or four half-courses, and in the Summer* (April-September) for two courses or three half-courses.
- (b) The courses selected in each year are subject to approval of the Board of Studies and, in the case of candidates for degrees, must conform to the regulations for concentration, distribution, and sequence of work.
- (c) Courses 1 and 2 in any subject except History, Economics, and Philosophy must be taken in different academic years.
- (d) Before registering a student should consult the time-table of lectures, as he must not register in two classes which meet at the same hour. The winter time-table is given in the Arts Calendar, and the summer time-table in the Summer School Announcement.
- 7. (a) Extra-mural students should register two or three weeks before the session opens in order that they may receive the preliminary instructions and provide themselves with books in time to start work promptly. They will be allowed to register up to September 10 for the winter or April 10 for the summer at the regular fee, and up to September 17 or April 17 on payment of an extra fee of \$3. Only under

^{*} The Calendar is issued in the Spring but it is not in force until the following autumn. The work of advanced whole courses, however, given at Summer School, will be based on the prescription in the calendar for the next session, since these courses must be completed during the following winter.

exceptional circumstances and by special permission of the Faculty will registration be accepted after these dates.

- (b) Extra-mural students cannot receive the examination returns before the last date of registration but should send fees to the Registrar within the required dates, stating the classes in which they wish to register if successful in their examinations. Necessary changes may be made later.
- 8. The fees payable upon application for registration are as follows:
- (a) Registration. A registration fee of \$10 must be paid once in each year, and an extra fee of \$3 for late registration as provided in section 7 (a).
- (b) Tutorial. The tutorial fee is \$10 for each course and \$5 for each half-course (indicated in departmental prescriptions by the letter a or b after the number). If the required amount of work in a course is not completed in the session, winter or summer, in which it is begun, the tutorial fee must be paid again, and the full work of the course sent in. See also section 22b.
- (c) Pro Tanto. A student desiring to have courses credited on work done elsewhere must pay a pro tanto fee of \$10 at the time of his first registration.

Minimum Residence Requirements

The University does not undertake to make it possible for a student to get a degree if he merely satisfies the minimum residence requirements given below, since in some subjects only a limited amount of instruction can be given extra-murally or in the Summer School. In the Sciences, for example, all the laboratory work must be done at the University and a student specializing in these subjects may find it necessary to spend two or three years in residence. The various departmental prescriptions indicate the parts of work offered extra-murally. Candidates should examine these prescriptions in connection with the Regulations for, Concentration.

9. Candidates for a degree must take at least nine courses in attendance at the University, either during regular Winter sessions or at the Summer School. Candidates for an Honour degree must attend during at least one regular winter session. In most cases an Honour Course will require much more than this minimum time. Examinations must be passed after each session's work.

10. Candidates for Specialists' certificates must attend at least two full sessions or, under the direction of the University, one full session and at least two sessions of the Summer School.

The Department of Education is willing to accept attendance of four years at the Summer School as covering attendance requirements for the Inspectors' Course.

Manner of Conducting Extra-mural Classes

(See also section 22)

11. The method of giving extra-mural instruction necessarily varies with the subject. Detailed information is contained in the instruction sheets provided from time to time. These specify the prescribed reading, assign exercises and essays to be written, and in some cases give the substance of intra-mural lectures. The first instalment of work is sent to the student as soon as he registers. The date of each essay or exercise coming in and of each criticism or fresh piece of work going out is recorded at the Registrar's Office. Each essay or exercise is promptly examined and returned to the writer with criticisms and suggestions.

Students should address their work and all enquiries regarding their work to The Director of Extension Courses, Queen's University, Kingston, Ontario.

Regularity of Work

12. All exercises must be sent in by the dates specified or they will be returned unmarked and without credit.

Transference from Extra-mural to Intra-mural Classes.

- 13. Extra-mural students may become intra-mural students during the winter session at any time after December 1, in those courses in which they have satisfactorily completed the work prescribed up to the date of their transferring. Fees already paid will be applied on intra-mural charges.
- 14. Students who transfer to intra-mural work before January may add enough "b" half-courses to give them five classes in the second term, if such half-courses are available and the pre-requisite work has been done.

Library Facilities for Extra-mural Students

15. Extra-mural students are expected to buy all text-books prescribed. They should also make generous provision for the purchase of

other books bearing on their work, as the Library cannot undertake to provide enough duplicates to serve the needs of students not in residence.

- 16. Three books may be borrowed at one time, provided that no two relate to the same piece of work. Unless a special arrangement is made, a book may be kept only two weeks from the date on which it is received.
- 17. Special arrangements are made for supplying the necessary books to extra-mural students in the Ph.D. Courses.
- 18. Extra-mural students must send to the Librarian a deposit of \$2 for the use of one book at a time, \$4 for two books, and \$5 for three. Books may be exchanged as often as the borrower wishes; and when all are returned, the deposit, less the amount spent for postage, will be repaid on request. No fee is charged for the use of the Library.
- 19. All communications concerning books and deposits must be addressed to The Librarian, Queen's University, Kingston, Ontario.

Regulations Regarding Examinations

Intra-mural and extra-mural examinations are the same in all subjects and are held at the same time. It is impossible, therefore, to modify the examination schedule to suit the personal convenience of students.

The attention of students is called to GENERAL REGULATIONS 10.

- 20. Examinations are held in December, April, and September, as folllows:—
- (a) Examinations in all half-courses of the first term are held during the last week before Christmas. These examinations are final and may not be postponed till April or September.
- (b) Examinations in all whole courses and in half-courses of the second term are held at the end of April. Examinations in Pass courses (numbered under 10) and in such Honour courses as may be offered in the summer, may be postponed till the autumn, but such postponement will lessen the amount of new work which may be completed in September.
- (c) Ordinarily an extra-mural student may not write in September on more than two courses or three half-courses. He may write on three courses, however, if examinations in one or more have been postponed from April.
- 21. Applications for examination in the particular subjects upon which a student proposes to write, accompanied by the proper fees, must reach the Registrar's office by November 1 for the December examinations, by February 15 for the April examinations, and by July 15 for the Sep-

tember examinations. The fees are \$3.00 for each half-course examination and \$6.00 for each whole course examination, with an additional charge of \$3.00 for late application, if accepted.

If the Registrar receives notice, at least ten days before the beginning of examinations, that a candidate will not write on a subject for which he has applied, the fee paid will be credited to him after the deduction of an administrative charge of two dollars.

- 22a. No student will be admitted to examination in any subject in which he has not fulfilled the requirements as to date of registration (see section 7a) and regularity of work (see section 12). Candidates are expected to send in all the essays and exercises at the dates specified, and the grade given on a particular course will be determined by the amount and quality of the work done. No candidate will be admitted to examination who has done less than eighty per cent. of the prescribed work. The last of the written work should reach the University at least two weeks before examinations begin.
- 22b. If in any session, summer or winter, a student does not complete the required work in a course, he must register again, pay all the fees and do all the exercises.
- 23a. A student who fails in course 1 or 2 in any subject (in course 1, 2 or 3 in the case of History) must pay the tutorial fee again and do all the work of the course before being admitted to examination in a subsequent year, but may write in September of the same year if at least thirty per cent. was made in April.
- 23b. Extra-mural students who make less than thirty per cent. in the examination on any other course must repeat the tutorial work in that course unless excused by the Director of Extension Courses acting on the advice of the Department concerned.
- 24. If a student who has completed the required work in a given subject wishes in some subsequent academic year merely to take the examination, he must pay the registration fee of \$10.00 as well as the examination fee specified in Section 21. The registration fee is payable at the beginning of the session.

Students are warned that they postpone examinations at their own risk as no special papers will be set even if courses are discontinued or radically changed. If a candidate postpones an examination for two years, he must repeat the tutorial work unless excused by the Director of Extension Courses acting on the advice of the Department concerned.

25. Extra-mural students in any of the modern languages will be required to take an hour a week of oral work with one of the regular classes during their intra-mural residence, and pass an examination on

such work. Students attending the Summer School will be given an opportunity of completing this oral work in the languages offered in the Summer School.

- 26. Students taking German, French or Spanish as a special subject must satisfy the Department concerned as to their oral qualifications. When an examination is necessary it must be taken at the University. Practical examinations in Science must be taken at the University.
- 27. Examination centres have been established at most of the larger cities and towns throughout Canada and a list of such centres is sent to all extra-mural students several months in advance of the examinations. Consideration will be given to an application to establish a new centre. Such application, accompanied by the special fee of \$10, must be made by November 1 for December examinations, by March 1 for April examinations, and by July 15 for September examinations.

Determination of Standing

28. See sections 29 and 30 of GENERAL REGULATIONS.

Fees for Extra-mural Students

- 29. A full statement regarding fees may be found under FEES.
- 30. Extra-mural students who enter as intra-mural students during the winter session will have their extra-mural fees applied on intra-mural charges. (See section 13.)
- 31. In no case whatever will refunds be made. In case of sickness, however, but under no other conditions, an application to have fees carried over will be considered if it is made within one month of registration and is accompanied by a doctor's certificate.
- 32. Cheques or drafts on any branch of the Bank of Montreal will be received at par. In other cases 15 cents per \$100 should be added to cover bank charges. Remittances should be made by Post Office or Express Order, by cheque, or registered letter.

Text-books

33. Texts may be obtained from the Technical Supplies Department, Queen's University, and Messrs. Uglow & Co., Kingston.

EXTRA-MIRAL, AND SUMMER SCHOOL WORK-SUMMER 1929, WINTER 1929-30

EAT KA-M	UKAL AND SUN	EATRA-MURAL AND SUMMER SCHOOL WORK—SUMMER 1929, WINTER 1929-50	Summer Extra-	Summer School	Winter Dates
	summer school compulsory	Summer Extra- mural only	mural; S School o	and winter Extra-mural	winter Extra- mural
•	32a, 48b		1, 2		1, 2, 30a, 45b
1	42b		A. 1, 2		A, 1, 2, 35a, 46b
			A, 1, 2		A, 1, 2, and some advanced work
Spanish		A, 1			A, 1, 2, 6, 18
	35a		1, 2	12	1, 2, 12
:	10a, 22a, 44b, 45a		1, 2		1, 2, 10a, 14b, 18, 20b, 22a, 24b
	18a, 30a, 31b and Research Course	1, 4	2, 3	13	1, 2, 3, 4, 13
:	4, 24a, 25a, 33b		1, 2		1, 2, 4, 16a, 19b, 25a, 63
			1, 2		1, 2, 27, 45
Mathematics	10a, 11b, 12a	3a, 4b, 7b	1, 2		1, 2, 3a, 4b, 10a, 11b
	1, 2, 12a, 13b				1, 2
	1			-	
-	1				
:	Chemistry 1, 2, 21b, 35a				
	Biology 1, 2, 10a, 12b, 20a, 23b				1, 2, 12a

EXTRA-MURAL AND SUMMER SCHOOL WORK

On the preceding page a Table shows all the courses offered through Extra-mural and Summer School instruction in the summer of 1929 and the winter of 1929-30.

An explanation of this Table, together with the more important regulations, is given below in condensed form.

I. Summer School Compulsory

See Table under this heading. These courses are open only to those who attend the Summer School.

- Registration required before April 10, with fee of \$10 if not paid in previous autumn.
- No extra-mural tuition fee, except in courses 1 and 2 of the Sciences (\$10 for each course, payable on registration).
- Preliminary work assigned on registration, but no extra-mural exercises except in courses 1 and 2 of the Sciences.
- Summer School attendance and work compulsory. Fee \$33.50, payable July 3.
- Examinations in September; or in December for first term work and in April for second term work. Fee \$6 for each full course; \$3 for each half course, payable before Júly 15 or on November 1 or February 15 according as examinations are written in September, December, or April.

II. Summer Extra-Mural Only

See Table under this heading. These courses are offered in the Summer only through Extra-mural work. They are not given in the Summer School.

- Registration required before April 10, with fee of \$10 if not paid in previous autumn.
- Tuition fee of \$10 for each full course and \$5 for each half course, payable on registration.
- Extra-mural work and exercises.
- Examinations in September; fee \$6 for each full course; \$3 for each half course, payable before July 15.

III. Summer Extra-Mural; Summer School Optional

See Table under this heading. These courses are offered in the Summer by Extra-mural work alone, or by Extra-mural work up to July 4 and Summer School work thereafter.

Registration required before April 10; fee of \$10 if not paid in the previous autumn.

Tuition fee of \$10 for each course, payable on registration.

Extra-mural work and exercises.

Summer School work and exercises optional; if taken, the fee is \$33.50, payable July 3.

Examinations in September; fee of \$6 for each course, payable before July 15.

IV. Summer School and Winter Extra-Mural

See Table under this heading. These courses are partly covered in the Summer School; the rest of the work is done extra-murally in the winter.

Registration before April 10 with fee of \$10 if not paid in previous autumn.

Tuition fee of \$10 for each course, payable on registration.

Preliminary work assigned on registration but no summer extramural exercises.

Summer School attendance and work compulsory. Fee \$33.50, payable July 3.

Winter extra-mural work in following winter; without additional fee if registration fee was paid in spring; otherwise, \$10.

Examination in April. Fee \$6 for each course, payable before February 15.

V. Winter Extra-mural

See Table under this heading. These courses are offered in the winter through extra-mural work. Laboratory work in the Sciences and oral work in the Languages must be done later at the University.

Registration required before September 10 with fee of \$10 if not paid in previous spring.

Tuition fee of \$10 for each full course and \$5 for each half course, payable on registration.

Extra-mural work and exercises.

Examinations in April; fee \$6 for each full course; \$3 for each half course, payable before February 15.

An extra-mural student may take four courses in a year with not more than two at any one time, summer or winter.

The registration fee of \$10 is payable once in the year; tutorial fees in September or April when beginning each course.

THE SUMMER SCHOOL

The twentieth session of the Summer School begins at 8 a.m. on Thursday, July 4, 1929, and closes at 5 p.m. on Wednesday, August 21.

Students are expected to register on Wednesday, July 3, in order to be ready to attend classes on Thursday. An extra fee of \$3 will be charged to those registering on Thursday and an additional \$1 for each day after that date if later registration is permitted.

Courses will be given in Latin, Greek, German, French, English, History, Philosophy, Economics, Mathematics, Physics, Chemistry, Biology, Geology and Mineralogy. By reason of daily lectures and almost individual instruction, it is possible to cover about half the work done in the corresponding courses of the winter session.

The libraries and various laboratories are available for use as in the winter session.

Ban Righ Hall, the women's residence, will be open during the summer and will accommodate one hundred students. Applications for rooms should be sent as early as possible to the Dean of Women.

Purpose of the Summer School

The Summer School offers University advantages to those who cannot attend the classes of the regular session.

It gives TEACHERS an opportunity to improve their scholarship in particular lines of study, to observe methods of teaching, and to become acquainted with books and equipment not ordinarily available.

It gives INTRA-MURAL students who have lost standing through illness or other causes an opportunity of qualifying for the September Supplemental examinations. Moreover, intra-mural students in their first or second years, who are unable to carry the required five courses, may, with the consent of the Board of Studies, take three or four courses in the winter and the rest extra-murally in the summer, provided that they attend the Summer School.

It gives EXTRA-MURAL students an opportunity to take the oral work required in the modern languages, to do in the laboratories the practical work required in the Science courses, and to satisfy by attendance at five sessions the minimum residence requirements for the degree of B.A. (See sections 9 and 10 under REGULATIONS REGARDING EXTRA-MURAL

WORK). Two sessions of the Summer School are accepted by the Department of Education as equivalent to one of the two winter sessions required for Specialists' Certificates.

Admission

No examination is required for admission to the Summer School. The classes are open to all who desire to improve their scholarship or professional equipment. Candidates for a degree, however, must satisfy matriculation requirements before being admitted to the University work and examinations, and must register for summer work in April.

No student working for credit is allowed to register for more than two courses or three half-courses in the Summer School.

Examinations

No examinations are held in connection with the Summer School. Students desiring credit for their work should write at the regular University examinations in September. See sections 12, 20, and 22 under REGULATIONS REGARDING EXTRA-MURAL WORK.

Fees

See FEES, page 53.

Further Information

The Announcement of the Summer School, containing full details concerning the work offered, is published each year in March, and is supplied on application.

All inquiries concerning the Summer School should be addressed to The Registrar, Queen's University, Kingston, Ontario.

FEES

Cheques tendered in payment of fees should be certified by the banks upon which they are drawn.

INTRA-MURAL

The fees specified under the first three heads are payable each year upon registration.
Tuition (including class fees, registration, December and April examinations and laboratory fees of course 1 in the sciences)\$70 00
Laboratory: Fees for all Science courses beyond course 1: Each whole course
Deposit for all courses in Science (unused portion will be refunded at close of session): Without Chemistry
Student interests: Men
The fees specified below are payable as they are incurred. Special Charges:
Pro tanto allowance of courses on work done elsewhere 10 00 Late registration (see also note, page 5)
One examination

Each whole course

Each half course

6 00

3 00

Examinations at outside centres:

FEES 53

Supplemental examinations:	
Each whole course	
Special students not paying full fees: Each course taken	
(Student interests and Laboratory charges as above)	
Graduation:	
Bachelor of Arts (in Course) 10 00	
Bachelor of Arts ad eundem gradum 20 00	
Bachelor of Commerce	
Master of Arts	
Doctor of Science	
Extra Fee for degree in absentia	
EXTRA-MURAL	
mi con ical and the continuous and the continuous and	
The fees specified under the first two heads are payable upon registration; the examination fees are payable at the dates given in section 21 of REGULATIONS REGARDING EXTRA-MURAL WORK.	
Registration:	
Regular fee (covering twelve months)\$10 00	
Late registration 3 00	
Change of work after registration	
Tutorial:	
Each course 10 00	
Each half-course 5 00)
Examination:	
Each whole course, April or September 6 00	
Each half-course, December, April, or September 3 00	
Establishing new centre	
Late application 3 00	
Graduation:	
The same fees are charged as in the case of intra-mural students.	
SUMMER SCHOOL	
Full Summer School attendance (all students)\$30 00	
Athletics	
Summer School Association 50	

Laboratory deposit as required of other intra-mural students.

SCHOLARSHIPS, PRIZES, AND MEDALS

I-MATRICULATION SCHOLARSHIPS

For a list of Matriculation Scholarships and the conditions of award see the publication entitled REQUIREMENTS FOR MATRICULATION.

II.—SCHOLARSHIPS IN ARTS

The Andrew Haydon Scholarship in Colonial History

Value \$50. Founded by Senator Andrew Haydon, M.A., '93, LL.B. Awarded on the results of the sessional examinations in the Pass class in Colonial History (History 3). Not to be held by any student unless in residence in the session following the award.

The W. M. O. Lochhead Scholarship in Economics.

Value \$50. Founded by W. M. O. Lochhead, M.A., '98, Kitchener, Ont. The Scholarship will be awarded to the student taking the highest standing in the sessional examinations and classwork in Economics 1, provided he is in attendance in some faculty of the University in the following session.

The Adam Shortt Scholarship in Political Science.

Value \$50. Founded by G. W. Mason, Esq., K.C., in honour of Dr. Adam Shortt, formerly Professor of Economics. Awarded to the student taking the highest standing in Economics 2, provided he is in attendance in the following session and is registered in advanced work in the Department of Political and Economic Science.

The P. D. Ross Scholarship in Commerce

Value \$150. Founded by P. D. Ross, LL.D., Ottawa. Awarded on the basis of the third year's work in the Commerce Courses, provided that the candidate is taking at least four full courses or their equivalent in the "Special Subjects" in Commerce and Administration and lacks not more than five other courses for graduation in Commerce. Tenable during the student's fourth year, if it is taken intra-murally.

The Sir Wilfrid Laurier Memorial Scholarship

Value \$100. Founded by the Ontario Women's Liberal Association for proficiency in French conversation: awarded only to a Canadian-born English-speaking student, a son or daughter of a British subject by birth or naturalization, not of French parentage, to perpetuate the memory of Sir Wilfrid Laurier.

Alexander Laird Scholarship in English 1

Value \$50. Founded in memory of the late Rev. Alexander Laird by his brothers and sisters and awarded annually to the student who makes the highest marks in English 1. Tenable only by a student in residence in the session following the award.

The Ann Eliza Stafford Scholarship in Biology

Value \$40. Founded by T. T. Bower, Esq., Toronto. Awarded to a graduate with first class Honours in Biology who is competent to undertake research work in Physiology. The holder must be willing to devote himself exclusively to research and must carry on his investigations in the University laboratories for at least one year from the date of his appointment.

The Maclennan Scholarship in Greek

Value \$25. Given by the late Hon. Jas. Maclennan, LL.D., Toronto, to encourage the study of Greek in the University. Awarded on the results of the April examinations in Greek 2 to the best student who is proceeding to the Honour course in Greek. Not to be held by any student unless in actual attendance, and not necessarily to be awarded unless a sufficient degree of merit is shown.

The N. F. Dupuis Scholarship in Mathematics

Value \$60. This is one of three scholarships founded by the graduates of the University in honour of the late Professor N. F. Dupuis on the completion of his forty-five years' service as Professor in the University. The scholarship is awarded to the student who takes the highest standing in Mathematics 1 in the April examinations. Tenable only by a student in residence in the session following the award.

The William Moffat Scholarship

Value \$50. Founded by Dr. William Moffat of Utica and awarded annually to the student making the highest standing in first year Chemistry. The award will be made on the combined results of class work and examination, and students in both Arts and Science are eligible. Tenable only by a student in residence in the session following the award.

Robert Bruce Scholarships

Under provisions of the will of the late Robert Bruce of Quebec the University has established a Scholarship worth about \$75 in each of the Faculties of Arts, Applied Science, and Medicine. Until 1948 the award is limited to students of Scottish extraction.

The Scholarship in each Faculty will be awarded at the end of the first year to the student who has made the highest standing on the

regular examinations of that year. One-third of the value of each Scholarship will be paid to the winner in each of the second, third, and fourth years of his Course provided that he is in attendance in the Faculty in which the award was made.

Jarvis Scholarships

For students from Glebe Collegiate Institute, Ottawa.

Two Scholarships of the value of \$25 each, the gift of A. H. Jarvis, Esq., of Ottawa, will be awarded under the following conditions: These Scholarships are open only to former students of the Glebe Collegiate Institute, Ottawa, who without some such assistance may not be able to carry on their academic courses. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Scholarships may be awarded to men or to women. A Scholarship may be held in successive years by the same student and also in conjunction with any other Scholarship awarded by the University.

The Scholarships shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the Principal of the University, the Principal of Ottawa Collegiate Institute and the donor. Candidates shall make application for the same not later than May 15th.

Dr. S. J. Keyes Scholarship

Value \$100. Awarded to graduates of the Ottawa Normal School who have completed by extra-mural or extra-mural and Summer School work four courses selected from courses 1 and 2 in the various subjects; tenable by a student in attendance for the first time at a regular session of the University. Application should be made to the Registrar by November 1 in each year.

Arts '15 Scholarships

(The capital sum is not yet fully collected)

Present value \$33. Founded as a memorial by the class of 1915. Awarded annually in turn by the Departments of English, Mathematics, and History to the student with highest standing in two Honour courses taken in the third year. Tenable by a student in residence in the following year. Awarded in English in 1929, in Mathematics in 1930, in History in 1931.

McIver Scholarship

Value \$250. Founded by J. B. McIver, former Treasurer of Queen's University. Awarded in 1930 to the student standing highest in the final marks of the session in the following three courses: 1, English 2; 2, Latin 2; 3, One of German 1 or 2, Greek 1 or 2, French 2. Tenable only by a student in residence the following session.

Welch Scholarship

Value \$125. Founded by Frederick Welch of Kingston. Awarded in the Faculty of Arts and open for competition only to the sons and daughters of non-commissioned officers and men who have served overseas in the late war, and of mechanics and laborers, which students shall at the time be bona fide residents of the City of Kingston; preference being had for the children of soldiers. Application for this Scholarship must be made to the Registrar not later than March 15 and must give evidence of eligibility in accordance with the terms of the will. The Scholarship will be awarded on the basis of the April examinations and will be tenable by a student in residence next session.

McLeod and McLean Scholarships

Founded by Jane McLeod. Two scholarships of \$42.00 each. Awarded each year to the two most promising and deserving students entering any Faculty of Queen's University from the Kingston Collegiate Institute.

III.—SPECIAL SCHOLARSHIPS

A .- The Rhodes Scholarship

A Rhodes Scholarship is tenable for three years, and is of the value of $\pounds 400$ per annum.

Scholarships will hereafter be thrown into open competition in each Province, subject to the following conditions:—

- 1. Candidates must be British subjects, with at least five years' domicile in Canada, and unmarried. They must have passed their nineteenth, but not have passed their twenty-fifth birthday, on October 1st of the year for which they are elected.
- 2. Candidates must be at least in their Sophomore Year at some recognized degree-granting University or College of Canada, and (if elected) complete the work of that year before coming into residence at Oxford.

3. Candidates must elect whether they will apply for the Scholarship of the Province in which they have acquired any considerable part of their educational qualification, or for that of the Province in which they have their ordinary private domicile, home, or residence. They must be prepared to appear before the Committee of Selection for the Province they select.

In each Province there is a Committee of Selection, in whose hands the nominations will rest. Candidates should apply before October 20 in each year to the Secretary of the Committee, D. R. Michener, 347 Bay Street, Toronto, 2.

Method of Selection

In accordance with the wish of Mr. Rhodes, the Trustees desire that in the election of a student to a Scholarship, regard shall be had to (1) his literary and scholastic attainment, (2) his qualities of manhood, truth, courage devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship, (3) his exhibition during school-days of moral force of character and of instincts to lead and take an interest in his schoolmates, and (4) physical vigour, as shown by interest in outdoor sports or in other ways.

Where circumstances render it impracticable to carry out the letter of these suggestions, the Trustees hope that every effort will be made to give effect to their spirit, but desire it to be understood that the final decision must rest with the Committee of Selection.

The following graduates of Queen's University have been awarded Rhodes Scholarships:

J. M. Macdonnell, M.A., 1905.

A. G. Cameron, B.A., 1906.

Norman S. Macdonnell, M.A., 1907.

Stanley Scott, B.A., 1911.

H. S. Smith, M.A., 1912.

A. G. Cumming, M.A., 1914.

H. R. MacCallum, B.A., 1919.

K. E. Taylor, B.A., 1920.

A. D. Winspear, B.A., 1922.

L. F. Kindle, B.A., 1925.

D. A. Skelton, B.A., 1926.

B.—The Science Research Scholarship

This postgraduate scholarship of the annual value of $\pounds 250$ was founded by Her Majesty's Commissioners for the Exhibition of 1851,

and is awarded to students who have given evidence of capacity for original research, and, except in very special circumstances, are under 26 years of age.

A given number of Scholarships are awarded annually to students in Canada recommended by the Universities approved by the Commission.

The nominee must be a British subject, must have been a bona fide student of Science for three years, must have been a student of this University for a full year immediately before his nomination, must be a student of this University at the time of his nomination (or he must have been a student at this University for a full year ending within twelve months prior to his nomination and since ceasing to be such student must have been engaged solely in scientific study), and must pledge himself not to hold any position of emolument while holding the scholarship without special permission from the Commissioners. He is recommended to the Commissioners by the Senate of the University. scholarship may be held for two years, if the report of the first year's work be satisfactory to the Commissioners, and in exceptional cases for a third year. In the absence of special circumstances, the scholar will not be permitted to conduct his investigations in the country in which he received his scientific education. The particular investigation the student proposes to pursue must be stated before a scholarship can be awarded.

The scholarship is payable quarterly in advance and a grant of £25 will be paid if a satisfactory final report is presented within three months of the expiration of the scholarship. If in the opinion of the Commissioners it is necessary a scholar will receive an additional annual allowance not exceeding £30, and in some cases the fare from his University will be partially paid.

Recommendations must be received at the office of the Commissioners on or before June 1.

The following Science Research scholars have been appointed from Queen's University:

Norman R. Carmichael, M.A, 1894. Thomas L. Walker, M.A., 1896. Frederick J. Pope, M.A., 1898. W. C. Baker, M.A., 1900. C. W. Dickson, M.A., 1901. C. W. Knight, B.Sc., 1904. F. H. McDougall, M.A., B.Sc., 1905. Campbell Laidlaw, B.A., M.D., 1907. N. L. Bowen, M.A., B.Sc., 1909. Walter A. Bell, B.Sc., 1911. John R. Tuttle, M.A., 1913. Robert C. Cantelo, B.Sc., 1915.

Douglas G. H. Wright, B.Sc., 1921. R. H. F. Manske, M.Sc., 1924. Donald C. Rose, M.Sc., 1924. H. M. Cave, M.A., 1926. B. W. Sargent, M.A., 1928.

C.—Arts Research Fellowships

The University has established two Fellowships of the value of \$500 and two of the value of \$250, open to men and women who have taken an Honour B.A. at Queen's or an equivalent degree elsewhere. At the discretion of the Committee on Arts Research one of the \$500 Fellowships may be awarded as a Travelling Fellowship, but with this exception the appointments are given only to those undertaking graduate studies at Queen's.

A student appointed to a Travelling Fellowship must submit and have approved a plan of study, and must present a report on his year's

work within twelve months of his appointment.

A student appointed to a Fellowship within Queen's may be required by the Committee in consultation with the Department concerned, to undertake work of any of the following kinds: (a) Independent investigation, (b) Assistance in research work carried on by the Department, (c) Tutorial assistance not to exceed six hours a week.

The holder of a Fellowship may be required to report in lectures or in written form the results of any investigations carried on.

The holder of a Fellowship shall not be permitted to do any tutorial work except such as may be required of him by the Department in which his special studies lie. In no case shall tutorial work exceed six hours a week or entitle the Fellow to additional remuneration.

Applications must be sent to the Registrar, accompanied by evidence of eligibility, not later than April 1 of each year.

The Fellowships will be awarded only to candidates of distinction and promise.

D.—The Sir James Aikins Fellowship in Canadian History

This Fellowship, of the annual value of \$250, was created through the generosity of Sir James Aikins, K.C., LL.D., of Winnipeg. It will be awarded to the student obtaining the highest standing in the Honour courses in Canadian History, namely, History 20, 21b, 30a, 31b, or such other courses as the Professor of Colonial and Canadian History shall determine.

The University will supplement this Fellowship by an amount which will bring the total sum to \$500. The Fellowship will be tenable only by students who return to the University for further work in Canadian History and will be subject to the conditions regarding tutorial work applicable to the Arts Research Fellowships.

E.—Scholarship of the Canadian Federation of University Women

The scholarship of the Canadian Federation of University Women, value \$1,250, available for study or research work, is open to any woman holding a degree from a Canadian university. In general, preference will be given to those candidates who have completed at least one or two years of graduate study and have a definite research in preparation. The award is based on evidence of character and ability of the candidate and promise of success in the subject to which she is devoting herself.

For all information address the Convener of the Scholarship Committee Dr. Geneva Misener, University of Alberta, Edmonton, Alberta. Applications must be received not later than February 1st.

F .- Daughters of the Empire Overseas Scholarship

As part of their War Memorial the Imperial Order Daughters of the Empire offer in each province in Canada a scholarship for postgraduate study in Britain. The value of the scholarship is \$1400 for one year.

These scholarships are subject to the following conditions:

- (1) Candidates may be men or women. They must be British subjects, with at least five years' residence in Canada, and unmarried. Except in the case of a returned soldier, sailor or airman, they must have passed their 19th but not their 27th birthday in October of the year in which they begin their work in Britain. In the case of a returned man, he must not have passed his 29th birthday in October of the year in which he begins his work in Britain. Each candidate must either hold a degree from a University or College in the province in which he or she is making application, or be in his or her final year in a course proceeding to a degree.
- (2) In each province a Committee of Selection will award the scholarship. Other things being equal, preference will be given to a returned man, his sister, son or daughter. The Committee will consider not only the academic record of the candidate, but his or her character, physical fitness, and promise.
- (3) Applications for this scholarship should be sent, before October 24th, to the Provincial Educational Secretary, I.O.D.E., Y.W.C.A. Building, Hamilton, Ontario, who will provide additional information about the scholarships.

The following graduates of Queen's University have been awarded Daughters of the Empire Overseas Scholarships:

Watson Kirkconnell, M.A., for the year 1921-1922. Hartley Munro Thomas, B.A., for the year 1923-1924.

G.—The Milton Hersey Fellowship in Chemistry

This Fellowship, of the annual value of \$500, has been endowed by Milton L. Hersey, M.Sc., LL.D., of Montreal. It is open to graduates of all universities and technical colleges.

The holder of this Fellowship shall carry on research work for the whole session and embody the results in a thesis. The research may take the form either of independent investigation or of assistance in an investigation carried on by some department. The Fellow may be required to undertake tutorial work not to exceed six hours a week.

Applications for Fellowships will be received by the Registrar up to May 1. If no appointment is made by that date, further applications will be received up to September 2.

IV.—PRIZES

In submitting literary articles or essays, candidates for prizes must observe the following regulations:

- 1. Competitive papers must be given to the Registrar not later than April 1.
- 2. Each paper is to bear a motto, instead of the author's name, and must have attached to it a sealed envelope, bearing the same motto and containing a written declaration over the author's signature, to the effect that it is his unaided composition.
- 3. The envelope attached to successful papers shall be opened and the writer's name made known at the Convocation at the close of the session.
- 4. Prizes will be awarded only to those productions which the examiners consider to be of sufficient merit.
- 5. All successful productions shall be the property of the University, and shall be at the disposal of the Senate.

Curtis Memorial Foundation

Value about \$70. Founded in memory of the late J. T. Curtis of Ottawa. Awarded in October to a graduate of that year (April or September), who has completed the degree Course by extra-mural and Summer School work. The award is made by a special committee on the basis of scholastic ability, interest in athletics, and service to the Summer School.

Gowan Foundation No. I

Value \$25. Established by the late Sir James R. Gowan, K.C.M.G. Awarded for the best essay written under examination conditions in February of each year, on one of a list of subjects prescribed by the Department of Political and Economic Science.

Gowan Foundation No. II

Value \$25. Given by the late Sir James R. Gowan, K.C.M.G., for the best collection of Canadian Ferns and Fern Allies. The plants must be good specimens, well pressed and mounted on herbarium sheets of the standard size. The collection must be delivered before December 15.

Gowan Foundation No. III

Value \$25 in books. Established by the late Sir James R. Gowan, K.C.M.G. Awarded in Honours in Political Science.

Latin and Greek Composition Prizes

Two prizes, each of the value of \$10 in books, are offered for competition for the best composition in Latin and Greek respectively. The subject for the Latin Prose in session 1929-30 will be Gibbon, Decline and Fall of the Roman Empire, Chapter I, beginning, "In the second century of the Christian Era" down to "than to the vanquished barbarians."

Greek Prose, Grote: *History of Greece*, chapter LXIII, pages 370-373: "The eighth year of the war... there can be little doubt that they would have acted with equal rigour."

Special Prize in German

A prize of the value of \$10 in books is awarded to the student obtaining the highest standing in German 2.

Special Prize in French

A prize of the value of \$10 in books is awarded to the student obtaining the highest standing in French 2.

McIlquham Foundation in English

Value \$27.50. Established by the parents of Mr. J. Max McIlquham, a student at Queen's University, 1912-15, who was killed on service overseas. Awarded for the best original poem, short story, or play, as the Department of English may decide from year to year. For 1929-30 the prize will be awarded for a short story.

James C. Rogers Prize in English

A prize of the value of \$5 in books. Awarded by James C. Rogers, B.A., '94, to the student obtaining the highest standing in English 2.

Special Prize in Spanish

A prize of the value of \$10 in books is awarded to the student obtaining the highest standing in Spanish 1.

Mary Fraser McLennan Prize in Hebrew

A prize of the value of \$12, founded in memory of Mary Fraser McLennan, of Lancaster, by her sons. Awarded to the student obtaining the highest standing in Hebrew 1, provided he intends to pursue a Theological Course in Queen's Theological College.

The M. C. Cameron Prize in Gaelic

Value \$40. Founded by the late M. C. Cameron, M.P., Goderich. Awarded to the best Gaelic scholar, reader, and speaker. Application for examination should be submitted to the Registrar before January 15 in each year. Work prescribed: any 600 lines of Ossian's Fingal, Blackie's Language and Literature of the Scottish Highlands, Gaelic Grammar, translation at sight of Gaelic into English and English into Gaelic. This scholarship will not be awarded to any candidate who does not take at least fifty per cent. of the total number of marks in the examination.

Special Prizes in Greek A

Two prizes of the value of \$100 and \$50 will be awarded to the two students making the highest marks in the examination in Greek A.

Robert Bruce Bursaries

The will of the late Robert Bruce of Quebec provided for a sum of about \$100 a year to be given in Bursaries "to students of promising ability but straitened circumstances." Until 1948 the award is limited to students of Scottish extraction.

This sum will be disbursed annually to one or more students in the third or later years in any Faculty. The Registrar will receive applications up to December 21 in each year.

V.-MEDALS

A medal is awarded by the University under the conditions stated below to the candidate who makes the highest standing in Honours in each subject, provided such standing is not less than 75 per cent.

- 1. A graduate in Arts or a Tutor engaged in teaching the Honour work of a competitive subject is not eligible for a medal.
- 2. A candidate for a medal must have completed at least six courses in the competitive subject, of which two full courses must be taken in the session at the end of which the medal is awarded.
- 3. The award is made on the basis of the candidate's standing in four Honour courses following course 2.

GENERAL REGULATIONS

All enquiries regarding regulations should be addressed to the Registrar.

Changes in regulations become effective immediately.

SPECIAL STUDENTS

- 1. Special students are those who do not intend to proceed to a degree. Such students may be admitted on satisfying the Faculty as to their ability to profit by the courses to which they seek admission.
- 2a. Special students under twenty-one at the opening of the session are subject to all the regulations affecting regular students and to the following special regulations:—
- (i) They shall not be granted admission for more than one session, though they may be readmitted to a succeeding session on a new application.
- (ii) They shall not be allowed any supplemental examination but must withdraw from the University immediately if they fail to satisfy the Faculty at the regular December or April examinations.
- (iii) Examinations passed by special students shall carry no credit towards Matriculation or towards a degree.
- (iv) Attendance as a special student will not count as part of the attendance required for a degree.
- 2b. Special students over twenty-one years of age at the opening of the session may by action of the Faculty be exempted from all regulations respecting attendance and work.

REGULATIONS REGARDING COURSES

In addition to the regulations below, see those under "Courses of Study leading to the Degree of B.A." Note particularly the provisions for Concentration, Distribution, and Sequence of Work.

Attendance and Work

3. Students are expected to be present at all lectures and laboratory periods and to hand in all essays and exercises when due. No one whose attendance or work falls below 80% of the total, whether on account of late registration, illness, or any other cause, will ordinarily be admitted to the final examinations in either December or April.

A careful record of absences based on monthly reports from Instructors is kept at the Dean's Office.

- 4. The December and April marks will be determined not merely by the results of examinations but also by the work of the whole term or session, including consideration of class tests, examinations, attendance, and progress.
- 5. The faculty may at any time either during the term or after the close of the term require any student to withdraw from the University whose conduct, attendance, work, or progress is deemed unsatisfactory.

Penalty for Failures and Low Grades

- 6. A student who has failed to pass the examination in any course must repeat the attendance and examination in that course in his next year at the University if he intends counting it towards a degree. If he should happen to register as an extra-mural student he must take this course and repeat the full work of the session.
- 7. A student who passes in only two whole courses or fewer out of four or five attempted in the final examinations will be considered to have failed in his year. Failure in the year will be determined by the results of the final examinations in December and April. A student who fails in his year will not have the privilege of the fall supplemental examinations.
- 8. A student who fails in his year for two consecutive years of attendance will be asked to discontinue his Course.
- 9. A student who fails in his year will retain credit only in those subjects in which he has obtained at least second division.
- 10. A student who makes less than 30% on a subject in the final examination in December or April will not be permitted to write on the fall supplemental examination in that subject unless he takes it again in the Summer School.
- 11. A student must make at least two second divisions in each year of attendance. If, in any year, two seconds are not obtained, a number of courses of that year already passed with third division, equal to the number of seconds lacking, must be repeated in the following year.

This regulation will not apply to a candidate who has obtained the ten second divisions required as a minimum.

For extra-mural students the first year in this regulation will mean the first five courses taken, the second year the second five, and so on.

12. Students whose standing for the first term is regarded as unsatisfactory will be asked to discontinue their Course for the rest of the year.

Number of Courses in a Year

- 13. No student is allowed to take more than five courses in the academic year. See, however, section 9 under ADMISSION TO THE FACULTY OF ARTS.
- 14. An intra-mural student, unless excused for some special reason, must take five courses in each of his first and second years. In no case will such a student be allowed to take fewer than three courses in his first or second year. In exceptional circumstances, he may, however, with the consent of the Board of Studies, take three or four courses in the winter session and the rest extra-murally in the summer, provided that he attends the Summer School.
- 15. Any student who without special permission drops a course in which he is registered will be regarded as having failed in that course.

Preparatory Courses

16. Students with full matriculation who desire to begin work in Greek, German, or Spanish may count course A in one of these subjects towards a degree. Such students may also count course A in one of these subjects toward the required number of courses for Minor, Major or Honour standing, provided that, in the case of Honours, at least five other courses are taken in the same subject. A student wishing to take Honours in one of the above subjects will be permitted to take course 1 during the summer after taking course A in the winter, but in that case he cannot count course A as a course towards his degree.

Courses A and 1 may not be substituted for courses 1 and 2 where the latter are definitely prescribed.

17. In no case may Latin A, French A, or Mathematics A be counted towards a degree or be given any credit at the University. Such instruction as may be provided, summer or winter, in one or more of these classes is merely for the purpose of assisting candidates to prepare for the regular matriculation examinations. See ADMISSION TO THE FACULTY OF ARTS, Sections 13 and 14.

REGULATIONS REGARDING EXAMINATIONS

(See also Regulations 4 to 12)

Mid-term Examinations

- 18. In every class numbered A, 1, 2, and in History 1, 2, and 3, there will be an hour examination arranged by schedule at the regular class hour about four weeks after the opening of the session.
- 19. Other hour examinations in the regular class hour may be held by any instructor whenever he thinks it advisable.

December Examinations

20. Mid-session examinations are held in all subjects, including courses for private work, during the last week before the Christmas holidays. Such examinations are final in half-courses of the first term. In courses that continue throughout the session credit not exceeding fifty per cent. of the final marks may be assigned to the work of the first term. Any student not writing on any mid-year examination is regarded as having failed and will be given a mark of zero.

The attention of students is specially called to Regulations 4, 7, and 12.

April Examinations

21. Final examinations are held in April. Intra-mural students must take these examinations in all the courses and half-courses in which they are registered in the second term. Permission to postpone until September examinations in courses numbered under 10 may be obtained in special cases but only upon the recommendation of the Professors concerned. Honour examinations may not be postponed. Examination Time-tables are issued each year in March.

The attention of students is specially called to Regulations 4, 7, and 9.

September Examinations

- 22. Supplemental examinations are held in September in all courses numbered under 10 and in such Honour courses as may be offered in the summer. Other supplemental Honour examinations may be given in September with the consent of the Board of Studies, if recommended by the Departments concerned.
- 23. No student is permitted to take a Supplemental examination in any course or half-course in which he had made less than thirty per cent. at the previous examination.
- 24. At the specified date (see pages 5 and 6) before the September examinations begin, each candidate must apply to the Registrar for permission to write on the subjects in which he desires to be examined. The application should be on printed forms supplied for the purpose and should be accompanied by the proper fees. See FEES.

Special Examinations

25. Students who for any reason fail to take an examination on the appointed date may be required to take a special examination. The fee is five dollars for one special examination or ten dollars for two or more special examinations.

Admission to Examinations

(See also Regulations 3, 21, 22)

- 26. Students will not be permitted to write on examinations unless they have registered at the prescribed date within the academic year in which they present themselves. (See REGISTRATION.) But graduates not in attendance who wish to take examinations merely to raise their standing in subjects passed may delay their registration till March 1.
- 27. No candidate will be admitted to the examination hall later than thirty minutes after the beginning of the examination.
- 28. No candidate will be permitted to take any books or papers into the examination hall except by express direction of the examiner.

Determination of Standing

- 29. In determining a student's standing at a sessional examination the Departments will take into account the entire class record. See Regulation 4.
- 30. The following percentages are required for the various grades of Pass and Honour standing in all courses:

PASS STANDING

(Applying only to courses numbered under 10)

	75 per cent. as	
Division III		er cent.

HONOUR STANDING

(Applying to all courses numbered 10 or over)

Class I.		nd over.
Class II		er cent.
Class III		er cent.
	a Pass Course	

COURSES OF STUDY LEADING TO THE DEGREE OF B.A.

GENERAL EXPLANATIONS.

Pass and Honour Courses.

The word "Course," when printed with an initial capital, is used to indicate a programme of work leading to a degree or certificate.

A candidate for the degree of Bachelor of Arts may take a Pass Course or an Honour Course. The latter requires greater specialization and higher standards in the work of the two main subjects. Details are given below under REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

Courses and Half-Courses.

The word "course," printed with an initial small letter, indicates a unit of work occupying, as a rule, three hours a week throughout the session. A "half-course," on the other hand, usually occupies only one term, though occasionally it may run through the session.

Two half-courses are equivalent to a course, and when the amount of work to be done is defined in courses, it is to be understood that an equivalent in courses and half-courses may be offered.

Numbering of Courses and Half-Courses.

Preparatory courses in the languages are designated by the letter A. See GENERAL REGULATIONS. Other courses are numbered with Arabic numerals (Latin 1, Greek 2). Half-courses have in addition to the numeral the letter a or b, according as they are offered in the first or second term. A half-course running throughout the session is marked hf. (Chemistry 133hf.)

Courses numbered 99 are Reading and Seminar Courses for candidates for the degree of B.A. with Honours. They may not be counted towards a Pass degree or towards the degree of M.A. See Section 2 under REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

The fundamental courses in each subject are numbered 1 and 2 (History 1, 2 or 3) and must be taken by all proceeding to advanced work. Other courses numbered under 10 are for Pass students only. Courses numbered 10 and upwards are Honour courses though in most departments some of them are open to Pass students.

SYNOPSIS OF COURSES

The following Courses of Study are outlined in the succeeding pages:

Pass and Honour Courses leading to the degree of B.A. Courses for Teachers' Certificates in the Province of Ontario. Courses in Commerce and Administration.

Combined Course in Arts and Applied Science.

Combined Course in Arts and Theology.

PASS AND HONOUR COURSES LEADING TO THE DEGREE OF BACHELOR OF ARTS

A candidate is subject to changes in Regulations or Courses made after his first registration unless in the judgment of the Board of Studies undue hardship is involved.

All enquiries regarding Regulations should be addressed to the Registrar.

1. Amount and Quality of Work.

Except with the permission of the Department concerned, a student may not register in a course numbered 10 or over unless he has made at least sixty-two per cent. in the preceding course.

A. Pass Degree. A candidate for the Pass degree of B.A. must extend his work over four years from Matriculation. He must pass in nineteen courses and make second division or over in at least ten. In courses numbered 10 or over, Third Class Honours will count as the equivalent of second division. Pass students may not count course 99 towards their degree.

A student who fails in an Honour Course will be given a Pass degree, if he makes the minimum percentages mentioned above and satisfies the requirements for concentration and distribution of work in a Pass Course.

B. Honour Degree. A candidate for the Honour degree of B.A. is advised to spend five years from Matriculation. He must pass in twenty courses with a minimum of fifty per cent. in each general subject, and in the Honour work of each special subject must make a minimum of fifty-five per cent. in each course with an average of sixty-six per cent.

2. Concentration of Work.

GENERAL PRINCIPLES

A. Pass Degree. Each candidate for a Pass degree shall take at least five courses in one subject to be known as his Major and at least four courses in a related subject to be known as his Minor.

B. Honour Degree. Each candidate for Honours must take at least twelve courses in two related subjects of which all but the first two in each subject shall be Honour courses, that is, chosen from the group numbered upwards from 10 in the departmental announcements. He must take at least five courses in each of his two special subjects and must include course 99 (Seminar and Reading course) in the subject chiefly emphasized, if this course is offered in the calendar prescription of work in that subject. Students in course 99 meet once a week for discussion, the remainder of the work being done by private reading. This course will not count towards a Pass degree or towards the Master's degree.

SPECIAL REGULATION

C. Pre-requisite courses. When the Major and Minor or Honour subjects belong to Group III (see the next section), and require two or three courses in other subjects as a pre-requisite (as Geology, Mineralogy, and Biology require Chemistry), they shall be reduced by the amount of work that must be taken beyond course one in the pre-requisite studies.

In accordance with this regulation the University will award Honours on the completion of the following special Courses:

Specialist's Course in Science

Six general courses selected from Groups I and II according to the general regulations.

Fourteen courses from Group III, viz., Mathematics 1, 2; courses 1 and 2 and an honour course in each of Physics, Chemistry, and Biology; an additional honour course in one of Physics, Chemistry, Biology; Geology 1; Mineralogy 1.

Course in Chemistry, Geology, and Mineralogy

Six general courses selected from Groups I and II according to the general regulations.

Fourteen courses from Group III, viz., Mathematics 1; Physics 1; Chemistry 1, 2, 21, 35, 41, and two others; Geology 1 (62%), Mineralogy 1 (62%), Geology 10 and any other two courses numbered 10 or over in Geology or Mineralogy.

3. Distribution of Work.

A candidate for a degree must distribute his work so as to include the courses indicated under each of the following groups:

Group I LANGUAGE AND LITERATURE	Group II PHILOSOPHY, HISTORY. POLITICAL AND ECONOMIC SCIENCE	Group III MATHEMATICS AND SCIENCE
English 1 and 2 Latin 1 and 2 Gone of Greek 1 and 2 German 1 and 2 French 1 and 2	Philosophy 1 or 2 ² Two of Philosophy 1 Philosophy 2 History 1 History 2 History 3 ³ History 4 Economics 1 Economics 2	Mathematics 1 2Two of Physics 1 Physics 2 Chemistry 1 Chemistry 2 Biology 1 Biology 2 Geology 1 4 Mineralogy 5 Astronomy 1

Italian, Spanish, Scandinavian, and Biblical Language and Literature may be counted towards a degree as optional subjects, but of these four only Spanish may be taken as a Minor, Major, or Honour subject.

Spanish and Italian may not both be counted towards a degree, but with the consent of the Department of Spanish, students taking a Major or Honours in Spanish may substitute Italian 1 for one of their lecture courses in Spanish.

Sequence of Work.

In each of his second, third, and fourth years a student must have his programme of work approved by the Board of Studies.

By special permission students proceeding to Theology may substitute first year Hebrew for a class in Latin.

2An Honour student not specializing in this Group may omit one of

³History 4 is compulsory for students taking an Honour Course in Latin and Greek and may be counted either as one of the required courses in Group II or as an optional course to make the required courses not open to other students as one of the compulsory Group II subjects.

*Mineralogy may be taken only by students who have had matriculation Chemistry or Chemistry 1 or are taking Chemistry 1 concurrently.

*5As one of the compulsory Science courses, Astronomy 1 is open only to Pass students.

only to Pass students.

⁶For graduate studies German and French are almost essential.

¹A student whose Pass Major and Minor are both in Group II will not be required to take Latin 2; a student whose Honour subjects are both in Group II may omit either Latin 2 or Mathematics 1; a student whose Major and Minor or Honour subjects are both in Group III may omit Latin or take it as an optional subject, or substitute it for the second year work in Greek, German or French.

The courses in each subject must be taken in the order prescribed in the Departmental announcements. Ordinarily course 1 is pre-requisite to course 2 and course 2 is pre-requisite to all other courses, but slight variations from this order are permitted by the Departments of History, Economics, Phliosophy, Mathematics, and Biology.

First Year

A student entering with Pass Matriculation shall take the following five courses in his first year:

- 1. Latin 1 (But those choosing their Major and Minor or Honour subjects from Group III must include a science instead of Latin 1. The latter may be taken later as an option.)
- 2. Greek 1, German 1, or French 1
- 3. English 1
- 4. Mathematics 1
- 5. A Science. (Those, however, who choose a third foreign language as one of the two special subjects must begin it at this point and postpone the science course).

Students will note that no course in Group II may be taken by a Pass Matriculant in his first year.

Students requiring for any purpose a certificate of having completed the first year's work must take the following five courses: (1) Latin 1; (2) Greek 1, German 1, French 1, or Spanish 1; (3) English 1; (4) Mathematics 1; (5) Physics 1 or Chemistry 1, or another of the courses named in (2).

Students without matriculation in Latin, French, or Mathematics must pass the regular matriculation examinations before being admitted to course 1 in these subjects.

Second Year

A student in his second year shall take five courses; he shall continue at least two subjects of his first year and include at least one subject from Group II.

Third and Fourth Years

A student intending to graduate in four years must in his third and fourth years take the remaining courses of his Minor, Major, or Honour subjects and such additional prescribed or optional work as may be necessary to satisfy the requirements for a degree—nineteen courses for a Pass student and twenty for an Honour student.

COURSES FOR TEACHERS' CERTIFICATES IN THE PROV-INCE OF ONTARIO

(Agreement of 1920)

I. Ordinary Certificates

The academic standing for admission to the professional Course leading to an ordinary High School Assistant's certificate is the degree of Bachelor or Master of Arts, Bachelor or Master of Science, or Bachelor of Commerce, from a British University, based upon Courses approved by the Minister of Education.

Each applicant must have Honour Matriculation standing in English, History, and Mathematics, or equivalent, if his degree Course did not include these subjects.

II. Specialists' Certificates

Subject to the conditions specified below, the academic standing required of Specialists may be obtained by completing a course in Arts with Honours in one of the following groups:

Greek and Latin French and German or Spanish English and History Mathematics and Physics Science

English and French

English and German or Spanish B.Com. Course (Specialist's Option)

Candidates for a Specialist's certificate in Science, should take the regular Honour Course in two of Physics, Chemistry, and Biology or one of the special Honour Courses referred to above under "Concentration of Work."

- 1. The Course shall extend over at least five years from Pass Matriculation or, as may be determined by the regulations of the University concerned, over four years from Honour Matriculation.
- 2. Candidates shall attend for at least two full academic years. Under the direction of the University they may substitute for one of those years at least two summer sessions.
- 3. The standard for each year shall be that prescribed by the University for candidates taking Honour Courses. A candidate who has completed the requirements for an Honour degree from the University but has not complied with the regulations as to time required for Specialist's standing may receive the Honour B.A. and later complete any further work required for the Specialist certificate.

A graduate of the Faculty of Applied Science may obtain the standing required for Specialists by taking certain additional courses as stated below.

III. Specialists' Certificates for Graduates in Applied Science

1. IN MATHEMATICS AND PHYSICS

A degree in Applied Science in one of the Courses of Mining and Metallurgical Engineering, Chemistry, Mineralogy and Geology, Chemical and Metallurgical Engineering, Civil Engineering, Mechanical Engineering, or Electrical Engineering with a subsequent standing of at least 55 per cent. in each of the following courses and an average of 66 per cent. in the work of each subject:

Mathematics 10a, 11b, 12a, 13a, 15a, 16b,

Physics 10, 12,

credit towards these being given when equivalent subjects have been satisfactorily taken in course.

or,

A degree in Applied Science in the Department of Physics with subsequent standing of at least 55 per cent. in each of the following courses and an average of 66 per cent. in the work of each subject:

Mathematics 10a, 11b, 12a, 13a, 15a, 16b, and another advanced full course.

Physics 10, 12,

credit towards these being given when equivalent subjects have been satisfactorily taken in course.

2. For Specialist Standing in Science

A degree in Applied Science in one of the Departments of Mining and Metallurgical Engineering, Chemistry, Mineralogy, Geology, Chemical and Metallurgical Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, or Physics, with a subsequent standing of at least 55 per cent. in each of the following courses, and an average of 66 per cent. in the work of each subject in courses numbered 10 or over:

Biology 1, 2, 10, 22a, 23b,

Physics 11a, 15b,

Geology 1,

Mineralogy 1,

Chemistry 2, and one of 21, 31, 41, 71 not previously taken, credit towards these being given when equivalent subjects have been satisfactorily taken in course.

It is understood that according to the regulations of the Department of Education professional certificates to teach in High Schools and Collegiate Institutes are given only to persons who have credit for Upper School work in English, Mathematics, and History, or the equivalent of these in University work.

III. Inspectors' Certificates

The academic requirements for a Public School Inspector's certificate are as follows:

- (1) An Honour degree in Arts or the degree of B.Com. (Commercial Specialists' Option) in accordance with the present agreement as prescribed for Specialist qualifications, or
- (2) A Pass degree in Arts with a standard of 66% in any five courses beyond course 1, and second division in any other five courses, as set forth in the Calendar of Queen's University for the academic year, 1924-25.
- (3) A candidate shall extend his Course over at least four years from Junior Matriculation and he shall attend the University classes (i) for at least two complete sessions approved by the University, or (ii) for at least one complete session, and two complete sessions of the Summer School, or (iii) for at least four complete sessions of the Summer School, or the equivalent thereof, with the supervision prescribed by the scheme agreed upon between the Department and the University.

COURSES IN COMMERCE AND ADMINISTRATION

These Courses, leading to the degree of Bachelor of Commerce, were established in 1919 to assist in meeting the need which exists in Canada of more systematic training for business and public service.

The Courses in Banking established in 1914 by Queen's University in co-operation with the Canadian Bankers' Association will hereafter be continued as part of the Courses in Commerce and Administration.

For further particulars consult Announcement of the Courses in Commerce and Administration, of which copies may be obtained from the Registrar.

COMBINED COURSE IN ARTS AND APPLIED SCIENCE

A course leading to the Degree of B.A. and B.Sc. in six years.

Students taking this Course are required to have Arts Matriculation and to register for the first two years in Arts alone and to pay the full Arts fees; to register for the third and fourth years in both Arts and Applied Science, paying the registration fees only in Arts and the Applied Science fees in full, including those of the Engineering Society; and to register for the last two years in Applied Science only,

paying full fees. Arts classes are subject to the regulations in the Arts Calendar and Applied Science classes to the regulations in the Applied Science Calendar; but the regulations of the Faculty of Applied Science concerning students who fail to pass their classes will apply to those Courses throughout.

The courses must be taken in the order in which they are laid down in the Calendar.

The degree of B.A. will be conferred on candidates who complete

four years' work with a minimum standing of fifty per cent. and sixty-two per cent. in half their classes.

Subjects numbered in Roman numerals are taken in the Faculty of Applied Science.

5.

1. English 2

Second Year

French 2 or German 2
 Philosophy 1 or 2

4. | Two of History 1, 2, 3,

Economics 2

First Year

1. English 1

- 2. French 1 or German 1
- 3. Mathematics 1
- 4. Mathematics IV. (Science).
- 5. Astronomy I. (Science).
- 6. Physics 1
- 7. Chemistry 1

Third Year

- 1. Course from Group I.
- 2. Course in a subject previously taken, but not covered by the later courses in Science.
- 3. Mathematics I., II. and III.
- 4. Surveying I.
- 5. Drawing I.
- 6. Projections I.

Fourth, Fifth, and Sixth Years

The fourth, fifth, and sixth years are the same as the second, third, and fourth years of the B.Sc. Courses. See the Calendar of the Faculty of Applied Science.

CCMBINED COURSE IN ARTS AND THEOLOGY LEADING TO THE PASS B.A. DEGREE IN FIVE YEARS

Queen's University and Queen's Theological College join in offering a Combined Course in Arts and Theology. The complete Course covers six years. The first, second and third years are entirely within the Faculty of Arts and the candidate must pay full Arts fees. The fourth year consists of one Arts class, for which a fee of \$25 is charged,

and of the first year in Theology. The fifth and sixth years of the Combined Course are the second and third years in Theology.

The degree of Bachelor of Arts is awarded at the end of the fifth year to candidates who have passed in all their subjects and made second divisions in at least half their Arts classes. The subjects covered are given below:

First Year

- 1. English 1
- 2. Greek A
- 3. Latin 1
- 4. Mathematics 1
- 5. Science

Second Year

- 1. English 2
- 2. Greek 1
- 3. Hebrew 1
- 4. Science
- 5. Philosophy 1 or 2

Third Year

- 1. Option
- 2. Greek 2
- 3. Hebrew 2
- 4. Option
- 5. Option

Fourth Year

- 1. An Arts course
- 2. Church History
- 3. Systematic Theology
- 4. O. T. Criticism
- 5. N. T. Criticism
- 6. Practical Theology and Public Speaking.

Fifth Year

- 1. Church History
- 2. Systematic Theology
- 3. O. T. Criticism
- 4. N. T. Criticism
- 5. Practical Theology.

If a student has Matriculation in Greek he will take Greek 1 and 2 in the first two years, and a freely chosen class in place of Greek 2 in the third year.

In choosing his options a student must plan to complete three courses in each of two subjects by the end of the fourth year.

DETAILS OF COURSES OF INSTRUCTION

LATIN LANGUAGE AND LITERATURE

PROFESSOR—Richard Orlando Jolliffe, Ph.D.
PROFESSOR IN CLASSICS—H. L. Tracy, B.A., Ph.D.
LECTURERS IN CLASSICS—Mary L. Macdonnell, M.A.
L. E. Law, B.A.

TUTORS—Florence G. Barrington, B.A., Annie C. Henderson, B.A., Florence B. Rothwell, Ruth L. Shaver, Mary E. White.

GENERAL NOTICE TO STUDENTS IN LATIN

A good Latin dictionary is an absolute necessity. For the Pass classes, Lewis' Latin Dictionary for Schools (Oxford Press) is recommended, or Lewis' Elementary Latin Dictionary (Oxford Press). Honour students must provide themselves with Lewis and Short's Latin Dictionary (Oxford Press). All students should own and use a Classical Dictionary—Smith's Smaller Classical Dictionary (Everyman's Library) is convenient and cheap—and a Classical Atlas (Atlas of Ancient and Classical Geography in Everyman's Library or Murray's Classical Atlas). A Latin grammar is indispensable. In all Pass classes Bennett's Latin Grammar (Allyn and Bacon) will be used. Honour students will require Allen and Greenough's New Latin Grammar (Ginn and Co.). Gow's Companion to School Classics (Macmillan) is a useful general handbook.

SIGHT TRANSLATION. Ability to translate Latin at sight will be tested on every examination paper in authors. The best preparation for translation at sight consists in the careful and honest reading of the prescribed texts without the aid of a translation.

REGULATIONS

- 1. Latin 1 is a prerequisite of Latin 2, and Latin 2 of all other courses.
- 2. A Minor in Latin consists of four courses: 1, 2, 32a, 33b, 41a, 45b.
- A Major in Latin consists of five courses: 1, 2, 32a, 33b, 41a, 45b. and 66 (a and b).
- 3. For Honours in Latin a student will take courses 1, 2, 66 (a and b), and from four to eight half-courses to be chosen after consultation with the department. In the third year students will ordinarily make this selection from courses numbered 30-39 and 50-59, and in the fourth year from courses numbered 40-49.

LATIN 81

COURSES OF INSTRUCTION

LATIN A. PREPARATORY COURSE.

This course is intended only to provide assistance for students preparing for Pass Matriculation examination in Latin. No University examination for credit will be given, nor does this course admit unmatriculated students to Latin 1.

Texts:

Ontario High School Latin Book. High School Latin Reader (Macmillan). Selections from Virgil (Gage).

Monday, Tuesday, Wednesday, and Friday at 1.

LATIN 1. TRANSLATION AND INTERPRETATION of Prescribed Texts, Sight Translation, Grammar and Prose Composition.

Note.—The examination will be divided into three sections corresponding to the above. Students must satisfy the examiners in each of the three sections of the paper.

Prescribed Texts:

Petrie, A Latin Reader with an Introduction to Roman History (Oxford Press); Selections from Caesar, Cicero, Pliny, Sallust, Livy, Catullus, Virgil, Horace.

Sight Translation of passages in prose or poetry similar in style and difficulty to the prescribed texts.

Bennett, Latin Grammar (Allyn and Bacon) (1929-1930).

Pilsbury, Latin Prose Composition (Oxford Clarendon Press); Exercises A and B in chapters i-xxxiii, omitting xxiv and xxv.

An extra tutorial period will be given for the benefit of students whose class-work is unsatisfactory.

Monday, Wednesday, and Friday at 10.

LATIN 2. TRANSLATION AND INTERPRETATION of Prescribed Texts, Sight Translation, Grammar and Prose Composition.

Note.—The examination will be divided into three sections corresponding to the above. Students must satisfy the examiners in each of the three sections of the paper.

Prescribed Texts:

Cicero, De Imperio Cn. Pompeii; pro Archia; Philippica IX (Select Orations of Cicero: King, Oxford Univ. Press).

Virgil, Selections from the *Eclogues*, *Georgics* and *Æneid*.

P. Vergili Maronis Opera (Sidgwick, Cambridge University Press, 2 vols.).

Bennett, Latin Grammar (Allyn and Bacon).

Sight Translation of passages in prose or poetry similar in style and difficulty to the prescribed texts.

Pilsbury, Latin Prose Composition (Oxford; Clarendon Press); Exercises A and B in chapters xxxiv-xlv; together with C exercises numbered 12, 21, 24, 32, 44, 56, 65, 86, 92, 101, 106, 122, 136.

Tuesday, Thursday and Saturday at 11.

LATIN 30a. CATULLUS.

Catullus (Merrill: Ginn and Co., New York).

Monday, Wednesday, and Friday at 10.

LATIN 32a. HORACE.

Horace: The Odes and Epodes (Shorey and Laing: B. H. Sanborn and Co., Boston).

Monday, Wednesday, and Friday at 9.

LATIN 33b. CICERO: ESSAYS.

Cicero, De Amicitia and De Senectute (Reid: Cambridge University Press).

Monday, Wednesday, and Friday at 11.

LATIN 40a. HORACE.

Horace: The Epistles and Ars Poetica (Wilkins: The Macmillan Co., New York).

Monday, Wednesday, and Friday at 9.

LATIN 41a. CICERO.

Cicero: Select Letters (How: Oxford University Press, 2 vols.).

Monday, Wednesday, and Friday at 11.

LATIN 45h. TACITUS.

Tacitus: Annals XIII-XVI (Pitman: Oxford University Press).

Monday, Wednesday, and Friday at 11.

LATIN 48b. VIRGIL, ECLOGUES AND GEORGICS.

P. Vergili Maronis Opera (Sidgwick: Cambridge University Press, 2 vols.).

Monday, Wednesday, and Friday at 9.

LATIN 51b. LIVY.

Livy: Book I (Edwards: Cambridge University Press).

Livy: Book V (Whibley: Cambridge University Press.

Monday, Wednesday, and Friday at 9.

LATIN 66 (a and b). LATIN PROSE, ROMAN HISTORY OF THE EARLY EMPIRE (14 A.D.-96 A.D.), HISTORY OF LATIN LITERATURE.

Lectures on Latin prose style, supplemented by a weekly theme. Lectures, colloquia, and essays on the history of the Early Empire. The history of Latin Literature, illustrated by reading in the original texts.

Tuesday, Thursday, and Saturday at 9.

LATIN 100. THE LATIN NOVEL. Apuleius, The Metamorphoses.

This course will include lectures on (i) The sources and development of the Latin novel; (ii) The Roman belief in magic; (iii) The religion of Isis.

Open only to candidates for the degree of M.A.

Monday, Wednesday, and Friday at 10. Professor Jolliffe.

LATIN 106. RESEARCH COURSE IN TACITUS AND SUETONIUS.

This course will consist of a critical reading of those portions of Tacitus and Suetonius which deal with the reign of Nero. Papers will be assigned on various problems. The aim of the course is to provide an introduction to the methods of historical research.

Open only to candidates for the degree of M.A.

Mr. Law.

GREEK LANGUAGE AND LITERATURE

PROFESSOR—T. Callander, M.A.

PROFESSOR IN CLASSICS—H. L. Tracy, B.A., Ph.D.

LECTURERS IN CLASSICS—Mary L. Macdonnell, M.A.

L. E. Law, B.A.

GENERAL NOTICE TO STUDENTS IN GREEK

The Greek Dictionary recommended is by Liddell and Scott (Abridged Edition). A Greek Grammar, preferably Goodwin's or Smyth's, is also necessary. Murray's Classical Atlas, Jebb's Primer of Greek Literature, or Norwood's Writers of Greece, Maisch's Greek Antiquities, and Bury's History of Greece are indispensable.

PROSE COMPOSITION. Students taking Greek as their Major or Minor, and Honour students in their first year work, will use Sidgwick's *Greek Prose Composition*.

REGULATIONS

Greek A may be counted towards a degree and towards a Minor or a Major or Honours under conditions specified in section 16 of GENERAL REGULATIONS. Students who enter the University without matriculation in Greek, and yet desire to specialize in this subject, may complete their programme of work in the usual time. If Greek A is taken in the winter session, Greek 1 may be taken in the summer provided that Greek A be not counted as a course.

For Pass students a Minor in Greek consists of four courses, including 1 and 2; and a Major in Greek consists of five courses.

For Honours in Greek a student must take from five to seven courses, including 60a and b.

COURSES OF INSTRUCTION

GREEK A. FOR BEGINNERS.

The text-book is White, First Greek Book (Ginn and Co.). The object of the course is to prepare students for entering the regular classes in Greek, and to cover an amount of work as nearly as possible the equivalent of Matriculation Greek. The elements of the language will be the chief concern; some continuous reading, however, will be done in passages suited to the ability of the student.

Tuesday, Thursday, and Saturday at 9 and Wednesday at 1.

Miss Macdonnell.

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GREEK 1.

1. TEXTS FOR SPECIAL STUDY:

Freeman and Lowe, Greek Reader (Oxford Press).

The Iliad, I-XII, Leaf and Bayfield (Macmillan). Selections.

The Acts of the Apostles, chapters i-v. Westcott and Hort's New Testament.

- 2. UNSEEN TRANSLATION.
- 3. Composition.

Pitman, Greek Prose Composition.

4. GRAMMAR.

GREEK 2.

Goodwin, Greek Grammar.

5. GENERAL READING:

Bury, History of Greece, chapters i-v.

Jebb, Primer of Greek Literature and Introduction to Homer.

Tuesday, Thursday, and Saturday at 10. Miss Macdonnell.

1. TEXTS FOR SPECIAL STUDY:

Euripides, Alcestis, ed. Earle (Macmillan).

Plato, Apology, ed. Stock (Oxford Press).

The Epistle to the Galatians, Williams (Cambridge Press).

- 2. UNSEEN TRANSLATION.
- 3. Composition.

North and Hillard, Greek Prose Composition (Rivington's).

4. GRAMMAR.

Goodwin, Greek Grammar.

5. GENERAL READING:

Sheppard, Greek Tragedy (Cambridge Press).

Maisch, Greek Antiquities.

Bury, History of Greece, chapters vi-xi. Every member of the class in Greek 2 should make himself familiar with the outlines of Greek History at the beginning of his course. Lectures on this subject will be given during the session.

Monday, Wednesday, and Friday at 10. Professor Callander.

GREEK 18b. GREEK EPIC. Intensive reading of Homer, Iliah I-XII, Leaf and Bayfield (Macmillan), with rapid survey of the *Iliad* and the *Odyssey* in translation.

Monday, Wednesday, and Friday at 9.

Professor Callander.

GREEK 20a. GREEK EPIC. Special study of Homer, Odyssey, I-XII, with additional reading in Mackail's translation. (Not given in 1929-30).

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GREEK 26a. HISTORIANS.

GREEK 35a.

Thucydides Book I, Marchant (Macmillan).

Tuesday, Thursday, and Saturday at 11. Mr. Law.

Greek 27a. Historians. Herodotus, Books V and VI, Abbot (Oxford University Press).

(Not given in 1929-30).

GREEK 33a. GREEK TRAGEDY. Set books are:

Aeschylus, Prometheus, in Loeb Library (Heinemann).

Sophocles, Oedipus Coloneus, edition of Jebb, abridged by

Shuckburgh (Cambridge University Press).

Euripides, Bacchae, in Loeb Library (Heinemann).

(Not given in 1929-30).

- GREEK 32b. GREEK TRAGEDY. Set books are:
 Aeschylus, Septem.. Sidgwick (Clarendon Press).
 Sophocles, Antigone, in Loeb Library (Heinemann).
 Euripides, Hecuba, Heberden (Clarendon Press).
 (Not given in 1929-30).
 - 5a. Comedy. Aristophanes, Acharnians and Birds, Merry (Oxford University Press), with collateral reading.

Monday, Wednesday, and Friday at 11. Professor Tracy.

- GREEK 38b. COMEDY. Aristophanes, Clouds, Merry (Oxford University Press). The Knights will also be studied in translation.

 (Not given in 1929-30).
- GREEK 40a. GREEK PHILOSOPHY. Plato, Crito and Phaedo; Aristotle, Ethics III. (Not given in 1929-30).
- GREEK 42b. GREEK PHILOSOPHY. Plato, Gorgias, Lodge (Ginn and Co.).

 Tuesday, Thursday, and Saturday at 11. Professor Tracy.
- GREEK 43b. GREEK PHILOSOPHY. Plato, Republic, Adam (Cambridge University Press, vol. II).

(Not given in 1929-30).

GREEK 47a. GREEK ORATORY. Demosthenes, *Philippics*, I-III, Abbot and Matheson (Oxford University Press).

(Not given in 1929-30).

GREEK 46b. GREEK ORATORY. Demosthenes, Olynthiacs, Abbot and Matheson (Clarendon Press), and Lysias, select orations, Shuckburgh (Macmillan).

Monday, Wednesday, and Friday at 10. Miss Macdonnell.

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GREEK 50. GREEK HISTORY. An advanced study of the period 480-431 B.C., based upon the original sources. The prescribed text is Thucydides, Book I, Marchant (Macmillan).

(Not given in 1929-30).

GREEK 60, a and b. GREEK TRAGEDY. Selected plays of Aeschylus, Sophocles, and Euripides will be read. One hour a week will be given to Greek Prose Composition.

This course must be taken by all Honour students in the Department of Greek.

Tuesday, Thursday, and Saturday at 10. Professor Callander and Professor Tracy.

GREEK 109. GREEK TRAGEDY. A mature study of Aeschylus, Agamemnon, Sidgwick (Oxford University Press), Sophocles, Electra, Jebb (Cambridge University Press), Euripides, Electra (Oxford Classical Texts, vol. II), combined with readings in Aristotle, Poetics, Bywater (Oxford University Press).

Open only to candidates for the M.A.

HEBREW

Professor-Rev. H. A. Kent, M.A., D.D.

REGULATIONS

Students proceeding to Theology may, with the permission of the Board of Studies, substitute Hebrew 1 for a course in Latin.

COURSES OF INSTRUCTION

HERREW 1.

The aim of this class is to enable students to read any of the narrative parts of the Hebrew Scriptures. The Christmas term is devoted entirely to thorough study and practice of grammar and exercises. After the Christmas vacation parts of Genesis and Samuel, or other books, will be read, in addition to the work in grammar and composition.

Text-books: Davidson, Hebrew Grammar (20th or later editions), pages 1-113. Kittel, Biblia Hebraica, or Hebrew Bible, issued by B. and F. Bible Society.

Lexicons. Brown-Driver-Briggs, or Bagster.

Tuesday, Thursday, and Saturday at 8. Professor Kent.

HEBREW 2.

This class aims at more advanced work in the Hebrew language than that attempted in course 1. The prophetic and poetic literature of the Old Testament will be studied and lectures given on Hebrew Syntax and the principles of Textual Criticism of the Old Testament. Students will be practised regularly in translating English into Hebrew, both viva voce and in written exercises.

Text-books: Davidson, Hebrew Grammar, pages 113-236, Hebrew Syntax. Hebrew Bible and Lexicon as in course 1.

Tuesday, Thursday, and Friday at 3. Professor Kent.

BIBLICAL LITERATURE

PROFESSOR-Rev. H. A. Kent, M.A., D.D.

REGULATIONS

- 1. Courses 1 and 2 are offered in alternate years. Only one of them may be counted towards a degree.
- 2. Subject to the provision of Section 1, the courses offered below are open to any student who has satisfied the requirements for concentration and distribution but needs one or more classes to make the necessary total for a degree.

BIBLICAL LITERATURE 1. OLD TESTAMENT LITERATURE AND HISTORY.

The beginnings of Hebrew literature; ballads; war-songs; folk-lore and Saga; historical prose; the literary sources of the Hexateuch and historical books; the origin and development of prophecy; Hebrew poetry and wisdom literature; the Apocryphal and Apocalyptic writings. Hebrew political history down to the Maccabean period, and the relation of the Hebrew people to the surrounding nations of antiquity.

P. C. Sands, Literary Genius of the Old Testament. Jordan, Ancient Hebrew Stories. Matthews, Old Testament Life and Literature. Offered in 1930-1931, but not in 1929-1930.

Tuesday, Thursday and Friday at 2. Professor Kent.

BIBLICAL LITERATURE 2. NEW TESTAMENT LITERATURE AND HISTORY.

Origin of New Testament writings: Codices and Manuscripts; the Latin Bible; the English Versions; the Gospels studied as the literary sources of the teaching of Jesus; the Synoptic and Johannine Problems; the life and letters of St. Paul; the Christian Apocalypses; the social and religious conditions in the Roman Empire and the spread of Christianity up to the end of the first century.

Text-books:

Moffatt, New Translation of the New Testament. Goodspeed, The Story of the New Testament. Glover, The Jesus of History. Stalker, St. Paul.

Offered in 1929-1930, but not in 1930-1931.

Tuesday, Thursday, and Friday at 2. Professor Kent.

GERMANIC LANGUAGES AND LITERATURES

PROFESSOR—John Macgillivray, B.A., Ph.D. ASSISTANT PROFESSOR—LECTURER—Hilda C. Laird, B.A.

REGULATIONS

- 1. German A may be counted towards a degree and towards a Minor or a Major or Honours under conditions specified in section 16 of GENERAL REGULATIONS. Students who enter the University without matriculation in German, and yet desire to specialize in this subject may complete their programme of work in the usual time. If German A is taken in the winter session, German 1 may be taken in the summer, but in this case German A must not be counted as a course.
- 2. The Minor in German consists of four courses or equivalent, including 1, 2, 11a, and 12b.
- 3. The Major in German consists of five courses or equivalent, including 1, 2, 11a, 12b, 31a.
- 4. Students making German one of their Honour subjects must take from five to seven courses or equivalent, including 1, 2, 11a, 12b, 31a. Those who make German their main subject must also take 99.
- 5. Students taking a Minor, a Major, or Honours in German should read as many of the prescribed works as possible during the long summer vacation, and present a report on such work at the beginning of the next term.
- 6. While the direct method will be more or less used from the beginning, the advanced classes will be conducted mainly in German.
- 7. Students should provide themselves at once with a dictionary, at first James' English-German Dictionary, then an all German one such as Hoffmann's Wörterbuch der deutschen Sprache.
- 8. The courses in Scandinavian (B, 25a, 26b) may be credited towards a degree as optional courses, but may not be included in the Major, Minor, or Honour group.

GERMAN A. PREPARATORY GERMAN.

This course is intended to meet the needs of students who, owing to the inadequate conditions in most of the secondary schools, enter the University with little or no knowledge of German. It is taken by students who need it to complete their Matriculation, or who desire to pursue a course in which German text-books or works of reference are prescribed or recommended. The requirements correspond generally to those for Pass Matriculation.

The work comprises drill on pronunciation, a study of the elements of grammar, the reading of easy literature, dictation, oral and written composition.

Text-books:-

Schrag and Alexis, First Course in German.

Müller und Wenckelbach, Glückauf, selected passages (Ginn).

Hansjakob, Aus dem Leben eines Unglücklichen (Macmillan and Co.).

Schiller, Das Lied von der Glocke (Heath).

Colmann, Easy German Poetry, selected poems (Ginn).

Tuesday, Thursday, and Saturday at 8, or Monday, Wednesday, and Friday at 11.

Or some other time to be agreed upon.

GERMAN B. ELEMENTARY SCANDINAVIAN.

The aim of this course is to give the student a reading knowledge of Swedish and Dano-Norwegian, and thus open to him the rich store of modern Scandinavian literature.

A knowledge of German is not required, but is helpful. Students specializing in German, and desiring advanced credit for this work, should register for courses 25a and 26b instead where the work is conducted in German and Scandinavian.

Text-books:-

Elmquist, Swedish Grammar (Augustana Book Concern).

Lagerlöf, Valda Berättelser (Augustana Book Concern).

One of the following:

Ibsen, Et dukkehjem (Gyldendalske Boghandel).

Björnson, Synnöve Solbakken (Free Church Book Concern).

Tuesday, Thursday and Saturday at 10.

'GERMAN 1. INTERMEDIATE GERMAN.

The work embraces the reading of modern authors, a more advanced study of grammar and syntax (in connection with the texts read and the written and oral exercises), memorizing of poems, writing from dictation, translation at sight, composition and oral practice.

Text-books:-

Schrag and Alexis, First Course in German, Review Lessons.

Schiller, Das Lied von der Glocke (Heath).

Betz, Modern German Reader, selections (Heath).

Storm, Geschichten aus der Tonne, selections (Ginn).

Ernst Zahn, Helden des Alltags (Crofts).
Collmann, Easy German Poetry, selections (Ginn).

Tuesday, Thursday, and Saturday at 9; Monday at 4.

Miss Laird.

'GERMAN 2. ADVANCED GERMAN.

The work consists of a more critical reading of modern literature, both prose and verse, oral and written composition based on this literature, with a more advanced study of grammar and syntax.

Text-books:-

Goethe, Das Märchen (Heath).

Storm, Der Schimmelreiter (Ginn).

Fiedler, German Short Stories (Oxford).

Heyse, Der verlorene Sohn, (Wiesbaden).

Smitthenner, Ad'm, Friede auf Erden (Wiesbaden).

Collman, Easy German Poetry, selections (Ginn).

Klee, Deutsche Mythologie, selections (Velhagen).

Schiller, Das Lied von der Glocke (Heath).

Monday, Wednesday and Friday at 10.

GERMAN 3a.

This course is designed for students who are doing advanced work in Chemistry, Physics, Geology, Mineralogy, Biology, and Anatomy. The reading will be selected to suit the members of the class.

Prerequisite: German A, or Matriculation in German.

Text-books:-

Bithell and Dunstan, A German Course for Science Students (Methuen).

For other Science students suitable texts will be read.

Monday, Wednesday, Friday at 9, or at a time to be selected.

GERMAN 11a.

An outline of Lessing's life and time precedes a critical reading of his most important dramatic, dramaturgic, and philosophical works.

Text-books:---

Löschhorn, Lessings Leben und Werke (Velhagen).

Franz, Hilfsbuch zu Lessing (Velhagen).

Lessing, Minna von Barnhelm (Holt), Emilia Galotti (Heath), Nathan der Weise (Ginn), Hamburgische Dramaturgie, selections (Holt), Briefe und Abhandlungen, selections (Velhagen). Fabeln u. Abhandlung über die Fabel.

Monday, Wednesday, and Friday at 11.

GERMAN 12b. GOETHE'S LIFE AND WORKS.

An outline of the poet's life and time precedes a critical study of his most important dramatic and lyrical productions.

Text-books:-

Heinemann, Goethes Leben und Werke (Velhagen).

Weitbrecht, Deutsche Literaturgeschichte der Klassikerzeit (Göschen).

Goethe, Faust, I (Hesse), Iphigenie auf Tauris (Holt), Torquato Tasso (Ginn), Egmont (Holt), Poems, selections (Holt), Das Märchen (Heath), Novelle, Shakespeare (Ehlermann).

Monday, Wednesday and Friday at 8.

GERMAN 21b.

The reading and interpretation of selected dramas, poems, letters, historical and philosophical writings will be accompanied by a rapid survey of the whole classical period, with special emphasis on the Storm-and-Stress movement.

Text-books:-

Lyon, Schillers Leben und Werke (Velhagen).

Weitbrecht, Deutsche Literaturgeschichte der Klassikerzeit (Göschen).

Schiller, Kabale und Liebe (Holt), Die Jungfrau von Orleans (Ginn), Wallenstein (Holt), Wilhelm Tell (Holt), Poems, selections (Holt).

At an hour to be selected.

'GERMAN 22a. GERMAN DRAMA.

The course gives in outline the history and technique of the German drama of the nineteenth century. A number of representative works are studied critically in class.

Text-books:-

Witowski, Das deutsche Drama des 19. Jahrhunderts (Teubner). Goethe, Faust (Hesse).

Grillparzer, Des Meeres und der Liebe Wellen (Oxford Press).

Ludwig, Der Erbförster (Holt).

Hebbel, Herodes und Marianne (Holt).

Freytag, Die Journalisten (Heath).

Hauptmann, Die versunkene Glocke (Holt).

Sudermann, Heimat (Heath).

Schnitzler, Der einsame Weg (Fischer).

At an hour to be selected.

'GERMAN 23b.

The course gives in outline the history and development of the *Novelle*. A number of representative short stories are studied critically, especially from the point of view of technique.

Text-books:-

Kleist, Michael Kohlhaas (Holt).

Keller, Romeo und Julia auf dem Dorfe (Holt), Kleider machen Leute (Heath).

Meyer, Gustav Adolfs Page (Heath).

Riehl, Die vierzehn Nothelfer (Ginn).

Heyse, Vetter Gabriel (Holt), Der verlorene Sohn (Wiesbaden).

Baumbach, Die Nonne (Heath).

Hoffman, Meister Martin der Küfner (Holt).

Gotthelf, Elsi, die seltsame Magd (Wiesbaden).

GERMAN 24b. THE GERMAN LYRIC.

The course gives in outline the history of the German lyric in the nineteenth century. A number of representative poets are studied critically in class, and some of their outstanding poems are committed to memory.

Text-books:-

Spiero, Geschichte der deutschen Lyrik seit Claudius (Teubner). Borinski, Deutsche Poetik (Göschen).

Fiedler, A Book of German Verse (Oxford Press).

Benzmann, Moderne deutsche Lyrik (Reclam).

Bethge, Deutsche Lyrik seit Liliencron (Hesse and Becker).

Tuesday, Thursday and Saturday at 9. or at an hour to be selected.

'GERMAN 25a. SWEDISH.

The course covers the same ground as the first term of course B, which is outlined above, and includes in addition selections from August Strindbergs *Hemsöborne*, sjatte upplagan (Albert Bonniers Förlag, Stockholm).

Prerequisite: German A and 1, or their equivalent.

Tuesday, Thursday and Saturday at 10.
Professor Macgillivray and Professor Alexander.

GERMAN 26b. DANO-NORWEGIAN.

The course covers the same ground as the second term of course B, and includes in addition Henrik Ibsen's *Hedda Gabler* (Norsk Förlag, Gyldendal).

Prerequisite: Course 25a.

Tuesday, Thursday and Saturday at 10.
Professor Macgillivray and Professor Alexander.

GERMAN 31a. SURVEY OF GERMAN LITERATURE AND HISTORY.

(i) An outline of the history of German literature, including its setting in the political and cultural history of the country. Special stress will be laid on the periods from 1750 to the present time. Assigned readings and reports.

Text-books:-

Heinemann, Deutsche Dichtung (Kroner).
Thomas, An Anthology of German Literature (Heath).
Fiedler, A Book of German Verse.

(ii) An outline of the political, social and cultural history of Germany. Assigned readings and reports.

Gunther, Deutsche Kulturgeschichte (Göschen).

Reference books:-

Kaemmel, Werdegang des deutschen Volkes (Reimer). Müller, Geschichte des deutschen Volkes. At an hour to be selected.

GERMAN 33b. HISTORY OF THE GERMAN LANGUAGE.

This course outlines the origin and evolution of language in general, and of the Aryan languages in particular. The Germanic family of languages will be stressed, especially Gothic, Old, and Middle High German. Gothic, as the oldest known member of the family, will be studied philologically in its relation to Low and High German, and these in their relation to each other. For this purpose specimen passages of Gothic, Old Low German, Old High German, Middle High German, and Modern Low German, or Netherlandish, and Scandinavian will be translated into Modern High German and also considered in a literary way.

Text-books:-

Lyon, Handbuch der deutschen Sprache, II (Teubner).

Braune, Gotische Grammatik mit ausgewählten Lesestücken; Althochdeutsches Lesebuch.

Golther, Der Nibelunge Nôt (Göschen).

Marold, Hartmann von Aue, Wolfram von Eschenbach und Gottfried von Strassburg (Göschen).

Valette, Niederländische Konversations-Grammatik (Julius Groos, Heidelberg).

Selections from courses 25a and 26b.

At an hour to be selected.

GERMAN 34a. PHILOSOPHICAL AND HISTORICAL GERMAN.

The extracts included in this course are contained in the volume Geistige Werte by Frischeisen-Köhler (Otto Reichl, Berlin).

Kant, Vom guten Willen:

Von der Pflicht.

Von dem praktischen Glauben.

Fichte, Die Bestimmung des Menschen.

Schelling, Über das Verhältnis der bildenden Künste zu der Natur.

Schleiermacher, Über das Wesen der Religion.

Schopenhauer, Über den Tod und sein Verhältnis zur Unzerstörbarkeit unseres Wesens an sich.

Hegel, Der Sinn der Weltgeschichte.

Fechner, Die Tagesansicht gegenüber der Nachtansicht.

Lotze, Von der Persönlichkeit Gottes.

Die Schöpfung als Wille, als Tat und als Emanation.

Nietzsche, Leben und Weisheit.

Dielthey, Das metaphysische Bewusstsein.

Herder, Von der Weisen Güte im Schicksal der Menschen.

Goethe, Die Natur.

Schiller, Staat und Kultur.

GERMAN 99. SEMINAR COURSE FOR HONOUR STUDENTS making German their main subject. Students will choose one of the following:

(a) The Literature of Romanticism.

The following works are read:

Jean Paul, Leben des Quintus Fixlein (Cotta).

Tieck, Ausgewählte Werke (Hesse).

Hoffmann, Doge und Dogaresse (Wiesbaden).

Novalis, $Ausgew\"{a}hlte\ Werke\ (Hesse)$.

Chamisso, Peter Schlemihl (Heath).

Kleist, Der zerbrochene Krug (Reclam).

Eichendorff, Aus dem Leben eines Taugenichts (Holt).

Fouqué, Undine (Holt).

Grillparzer, Die Ahnfrau (Holt), Der Arme Spielmann (Cambridge Plain Texts).

Fiedler, A Book of German Verse (Oxford Press).

Schweizer, Vom Deutschen Geist der Neuzeit, selections, (Cambridge).

Walzel, Deutsche Romantik (Teubner).

(b) The Literature of Realism.

The following works are read:

Hebbel, Agnes Bernauer (Heath).

Freytag, Soll und Haben (Ginn), Der Staat Friedrichs des Grossen (Cambridge).

Fontane, Grete Minde (Holt).

Hauptmann, Vor Sonnenaufgang, Die Weber (Fischer).

Sudermann, Frau Sorge (Holt).

Ernst Zahn, Lukas Hochstrassers Haus.

Frenssen, Jörn Uhl (Grote).

Schweizer, Vom Deutschen Geist der Neuzeit, selections, (Cambridge).

Bethge, Deutsche Lyrik seit Liliencron (Hesse und Becker).

Time to be arranged.

Storm, In St. Jürgen (Heath).

FRENCH

Professor-P. G. C. Campbell, M.A., Docteur de l'Université de Paris.

ASSISTANT PROFESSOR-W. M. Conacher, B.A.

ASSISTANT PROFESSOR—F. H. Walter, M.A., Docteur de l'Université de Paris.

LECTURER-Harcourt Brown, M.A.

INSTRUCTOR-Jeanne C. McConnell, Brevet Supérieur, C.A.P.

REGULATIONS

- 1. French 1 is a prerequisite of French 2 and French 2 of all other courses.
- 2. Pass students making French their Minor subject will take courses 1, 2, 8, and 14, in four different years.
- (a) If making French their Major, they will add 10, after passing 8.
- (b) Anyone who has made Division I, in French 2, will, instead of 8 and 14, take 10 and 14, and will, if making French their Major, take 12 after passing 10.
- 3. Honour students making French one of their Honour subjects after 1 and 2 will take 10 and 14 in the third year, and 12 with one of 27, 35a and 30b or 40 in the fourth year.
- (a) Those who have made Division I in French 2, will take 12 and 14 in the third year and any two of 27, 35a and 30b, or 40 in the fourth year.

N.B.—The choice between 27, 35a and 30b, and 40 can only be made after consultation with the Department.

- 4. All oral examinations must be taken at the University.
- 5. Honour groups for conversation and phonetic study will meet at hours to be arranged at the beginning of term.
- 6. For the Sir Wilfrid Laurier Memorial Scholarship of \$100 awarded for proficiency in French conversation, see Scholarships.

Courses of Instruction

FRENCH A. PREPARATORY FRENCH.

This course is only intended to provide assistance for students preparing for the Pass Matriculation examination in French. No University examination for credit will be given nor does this course admit unmatriculated students to French 1.

Fraser and Squair, High School French Grammar.

The High School French Reader, with further readings.

Monday, Wednesday, and Friday at 2. Mme McConnell.

French 99

'FRENCH 1. FIRST YEAR FRENCH.

Hugo, La Chute (American Book Co.).

Maurois, Les Silences du colonel Bramble (Cambridge Univ. Press).

De Caillavet et de Flers, Primerose (Heath).

Favorite French Stories (Allyn and Bacon).

Duhamel and Minssen, Primer of French Prose Composition (Rivingtons).

Siepmann, Short French Grammar (Macmillan).

The oral examination will be held during the term.

Monday, Wednesday, and Friday at 9.

Tuesday, Thursday, and Saturday at 9.
Professors Conacher, Walter, and Mr. Brown.

FRENCH 2. SECOND YEAR FRENCH.

Molière, Le Bourgeois Gentilhomme (Ginn).

Hunkins, Favourite French Poems (Holt).

Daudet, Tartarin de Tarascon (Holt).

Lanson et Desseignet, La France et sa civilisation (Holt).

Duhamel and Minssen, French Prose Composition for Middle Forms (Rivingtons).

Siepmann, Short French Grammar (Macmillan),

or (for students intending to take higher courses)

The Wellington College French Grammar (D. Nutt).

The oral examination will be held during the term.

Monday, Wednesday, and Friday at 10. Tuesday, Thursday, Saturday, at 10.

Professors Campbell, Conacher, Walter, Mr. Brown.

FRENCH 8. THIRD YEAR FRENCH-CONTEMPORARY AUTHORS.

Romain Rolland Jean Christophe-L'Aube (Holt).

Sacha Guitry, Deburau.

Pierre Benoît, L'Atlantide (Albin-Michel).

Poésies françaises, 1860-1925 (F. S. Crofts).

Malakis, Intermediate French Grammar (Holt).

Le Petit Larousse Illustré.

Monday, Wednesday, and Friday at 10. Professor Walter and Mr. Brown.

FRENCH 10. EIGHTEENTH CENTURY LITERATURE.

Montesquieu, Lettres Persanes (Larousse).

Voltaire, Romans Choisis (Renaissance du Livre).

Prévost, Manon Lescaut (Gowan's International Library, Perche).

Beaumarchais, Le Barbier de Séville (Blackie).

Rousseau, Les Confessions (Larousse).

Le Petit Larousse Illustré.

Ritchie & Moore, Junior Manual of French Composition (Cambridge Univ. Press).

Monday, Wednesday, and Friday at 11.

Professor Walter.

FRENCH 12. REPRESENTATIVE FIGURES OF FRENCH LITERATURE.

Molière, Le Malade Imaginaire (Ginn).

La Fontaine, Fables (ed. T. Keen, Dents).

V. Hugo, Notre Dame de Paris (Macmillans).

Balzac, Eugénie Grandet (Holt).

Loti, Pêcheur d'Islande (Holt).

Rostand, Cyrano de Bergerac (Holt).

Ritchie & Moore, Junior Manual of French Composition (Cambridge Univ. Press).

For Private Reading:

B. de Saint-Pierre, Paul et Virginie (Oxford Univ. Press). Michelet, Jeanne d'Arc (Hachette).

Monday, Wednesday, and Friday at 11.

Professor Conacher.

FRENCH 14. INTRODUCTION TO LITERATURE.

Literary Problems.

French Classical Tragedy.

Corneille, Le Cid (American Book Co.).

Racine, Phèdre (Heath).

This course may not be taken before 10 (or 12, if this course is taken instead of 10).

Tuesday, Thursday, and Saturday at 9.

Professor Campbell.

FRENCH 26. ROMANTICISM. (Not offered 1929-30).

FRENCH 27. THE SEVENTEENTH CENTURY.

Schinz and King, Seventeenth Century French Readings (Holt). Lanson, Choix de Lettres du XVIIº Siècle (Hachette).

Molière, Tartuffe (Garnier).

Les Fourberies de Scapin (Heath).

Retz, Mémoires, Les meilleures pages (Renaissance du Livre). Voltaire, Le Siècle de Louis XIV (Garnier).

Tuesday, Thursday, and Saturday at 11.

Mr. Brown.

French 101

FRENCH 30b. TRANSLATION FROM FRENCH, PROSE AND COMPOSITION.
Ritchie and Moore, Manual of French Composition (Cambridge

University Press).

Wellington College French Grammar (Nutt).

Le Petit Larousse Illustré.

Open only to Honour students. Registration must be made in September. Prerequisites, 10 or 12 and 14.

Tuesday, Thursday, and Saturday at 10.
Professor Campbell.

FRENCH 35a. THE CRITICISM OF FRENCH LIFE AND LITERATURE.

The following topics will be treated: Rousseau, Lettre sur les Spectacles (Hachette). Les Châteaux (3rd series).

Prerequisites, 10 or 12, and 14.

Tuesday, Thursday, and Saturday at 10.

Professor Campbell.

FRENCH 40. HISTOIRE DE LA LITTÉRATURE FRANÇAISE.

This is a survey course conducted entirely in French.

The Oxford Book of French Verse, with other reading.

Prerequisites, 10 or 12 and 14.

Tuesday, Thursday, and Saturday at 11.

Professor Walter.

FRENCH 99. HONOUR READING AND SEMINAR COURSE for those taking their main work in French. Students may select one of the following options or arrange with the Department some equivalent course:

- (1) Mœurs du moyen-âge.
- (2) Mœurs du dix-septième siècle.
- (3) Voltaire.
- (4) Théâtre moderne.
- (5) Littérature canadienne-française.

FRENCH 100. THE NOVEL.

Open only to candidates for M.A.

FRENCH 105. FRENCH CLASSICAL TRAGEDY.

Open only to candidates for M.A.

Professor Campbell.

FRENCH 110. OLD FRENCH.

Literary and Linguistic Study of La Chanson de Roland.

The Problem of Les Chansons de Geste:

Bédier (J.), Les Légendes épiques, 4 vols.

Open only to candidates for M.A.

Professor Campbell.

FRENCH 115. MIDDLE FRENCH.

Open only to candidates for M.A.

Professor Campbell.

SPANISH AND ITALIAN LANGUAGES AND LITERATURE

PROFESSOR—J. H. Brovedani, D-ès-L. INSTRUCTOR—Caroline E. McNeill, M.A. TUTORS—Isabel Davidson, Verlie Williamson.

SPANISH

REGULATIONS

- 1. Spanish A may be counted towards a degree and towards a Minor or a Major or Honours under conditions specified in section 16 of GENERAL REGULATIONS.
- 2. Spanish A is a prerequisite to Spanish 1 and Spanish 1 is a prerequisite to all other courses.
- 3. The Minor consists of courses A, 1 (1, 2 for students entering with Spanish Matriculation), and two more courses.
- 4. The Major consists of courses A, 1 (1, 2 for students entering with Matriculation in Spanish), and three more courses. Italian 1, with the consent of the Department, may be substituted for one of the courses.
- 5. Honours consist of A, 1, 2, and three or four other courses. Italian 1, with the consent of the Department, may be substituted for one of the courses. When Italian 1 is counted as one of the courses in Spanish for the Honour B.A. the marks in Italian will be averaged with those of the advanced courses in Spanish and a standing of 66% over all will be required. The same applies to Spanish 2 if Spanish A is counted towards the degree.

Students making Spanish their main Honour subject must include Spanish 99.

- 6. Students in commercial courses will take A, 1, 2, or A, 1 and 6.
- 8. Reference Books:

DICTIONARIES: Velázquez, English-Spanish (Appleton), or Cuyás, English-Spanish (Appleton), which is less expensive. Honour students are strongly recommended to use also Pequeño Larousse (Heath), written entirely in Spanish, and Alemany, Diccionario de la lengua española.

GRAMMARS: For First and Second year Students: Ramsay, Book of Modern Spanish. For advanced students: Bello-Cuervo, Gramática Castellana (R. Roger & F. Chernovis, Paris), one of the best Grammars written entirely in Spanish, and Pidal, Gramática Histórica.

PRONUNCIATION: Moreno-Lacalle, Elements of Spanish Pronunciation (Sanburn). Navarro-Tomás, Pronunciación Española (Centro Estudios Históricos, Madrid) the best work of its kind, indispensable for students taking the Specialist Course.

HISTORY OF LITERATURE: Fitzmaurice-Kelly, History of Spanish Literature. There is also a Spanish edition of this work with an up-to-date bibliography. Mérimée, Histoire de la littérature espagnole (Garnier Frères, Paris). Salcedo, Literatura Española (Casa Editorial Calleja, Madrid). Hurtado La Serna y Gonzales, Historia de la literatura Española (Madrid, 1921, also New York, Zabala and Maurin). C. Barja, Libros y Autores clásicos (The Vermont Printing Co.).

SPAIN AND ITS PEOPLE: Richard Ford, The Handbook for Travellers in Spain, London (John Murray, 8th edition, 1892. There is also an Everyman's edition of the same work entitled Ford's Gatherings from Spain.) George Borrow, The Bible in Spain (Dent), T. Gautier, Voyage en Espagne, E. de Amicis, Spain and the Spaniards (Putnam), are classics with which every student of Spanish must be acquainted. Havelock Ellis, The Soul of Spain (Houghton Mifflin Co.), S. L. Bensusan, Home Life in Spain (Macmillan), J. B. Trend, A Picture of Modern Spain (Houghton Mifflin Co., 1921), are good modern works on this subject. Courses of Instruction

SPANISH A. ELEMENTARY SPANISH.

Grammar, Composition, Translation, Reading and oral exercises. Prescribed texts:

Moreno-Lacalle, Elementos de Español (Sanborn), for intramural students only. The grammar for extra-mural students will be prescribed in the outlines.

Hills and Cano, Cuentos y leyendas (Heath), first term.

C. Marcial Dorado, Segundas lecciones de español (Ginn), second term.

Division A, Tuesday, Thursday, and Saturday at 9. Division B, Monday, Wednesday, and Friday at 11.

SPANISH 1. INTERMEDIATE SPANISH.

Prerequisite—Spanish Matriculation, or Spanish A.

Grammar, Composition, Translation, Conversation and Study of the following prescribed texts:

Cuentos Humorísticos Españoles (Macmillan), first term.

Hills, Spanish Tales (Holt).

Luquiens, Spanish-American Reader (Macmillan), first term.

Quintero, Mañana de Sol (Heath), second term.

Cool, Spanish Composition (Ginn).

Ford, Spanish Composition (Heath).

Monday, Wednesday, and Friday at 9.

'SPANISH 2. ADVANCED SPANISH.

Prescribed texts:

Hugo Wast, La Casa de los Cuervos (Macmillan).

L. A. Wilkins, Antología de Cuentos Americanos (Heath).

Martínez de la Rosa, La Conjuración de Venecia (Sanborn), second term.

Quintero, Doña Clarines (Heath), second term.

Cool, Spanish Composition, Lessons 14-28.

Remy, Spanish Composition (Heath).

Tuesday, Thursday, and Saturday at 10.

SPANISH 6. COMMERCIAL SPANISH. Prerequisite, Spanish 1.

Prescribed texts:

McHale, Commercial Spanish (Heath).

Whitten and Andrade, Spanish Commercial Correspondence (Heath).

Hugo Wast, La Casa de los Cuervos (Macmillan).

L. A. Wilkins, Antología de Cuentos Americanos (Heath). Quintero, Doña Clarines (Heath).

Tuesday, Thursday, and Saturday at 10.

SPANISH 18. THE GOLDEN AGE.

Don Quixote, Ormsby's translation, Vols. III-VI of the Complete Works of Cervantes, edited by Fitzmaurice-Kelly (Gowans and Gray), or Everyman's English Edition.

Don Quixote must be read before the beginning of the term by all students intending to register for this course, otherwise the class lectures will not be understood.

Cervantes' Don Quijote, Selections edited by Ford (Heath), for class use only.

Don Quijote, Clásicos Castellanos (La Lectura), Madrid, must be owned and read by Extra-mural Honour students.

G. T. Northup, Spanish Literature (University of Chicago Press). (For Extra-mural students only.)

Calderón, La Vida es Sueño (A. B. C.).

Calderón, El Alcalde de Zalamea (Heath).

C. Barja, Libros y Autores clásicos (The Vermont Printing Co.).

Hurtado La Serna y Gonzales, *Historia de la literatura Española*, Madrid; also New York, Zabana and Maurin. (For Extra-mural students only).

Alternate years only. Offered in 1929-30.

Monday, Wednesday, and Friday at 10.

SPANISH 20. THE NOVEL FROM 1868 AND CONTEMPORARY DRAMA.

Students must read the following works before the beginning of the term: Alarcón, El Sombrero de tres Picos (Holt); Valera, Pepita Jiménez (Heath); Valdés, La Hermana San Sulpicio (Ginn); Galdós, Doña Perfecta (Ginn); Sierra, Canción de Cuna (Heath); Benavente, La mal Querida (Spanish edition from the Library); Intereses Creados, Sin querer De pequeñas causas (Heath); Quintero, La Flor de la Vida (Heath); Buceta and Cornish, Tres comedias contemporaneas (Holt).

Other books will be added at the beginning of the session.

Alternate years only. Not offered in 1929-30.

Monday, Wednesday, and Friday at 10.

- SPANISH 22. CERVANTES AND THE DRAMA IN THE GOLDEN AGE.
- SPANISH 24. THE ROMANTIC PERIOD AND LYRIC POETRY FROM THE MIDDLE OF THE 19TH CENTURY.
- SPANISH 25. MAIN CURRENTS OF SPANISH LITERATURE.
- SPANISH 28. SPANISH-AMERICAN LITERATURE.
- SPANISH 29. SPANISH RENAISSANCE.
- SPANISH 99. READING AND SEMINAR COURSE FOR HONOUR STUDENTS.

ITALIAN

REGULATIONS

- 1. With the consent of the Department students taking Honours or a Major in Spanish may substitute Italian 1 for one of their lecture courses in Spanish. For standing required on the Honour Course see regulation 5 under Spanish. This course is offered every year.
 - 2. No extra-mural instruction is offered in Italian.
 - 3. Spanish A and Italian 1 may not be taken in the same year.

COURSES OF INSTRUCTION

ITALIAN 1. ELEMENTARY ITALIAN.

Russo: Elementary Italian Grammar (Heath).

Oral Exercises, Dictation, Grammar, Composition.

Reading of extracts from Modern Italian authors.

Reading and translation of Castelnovo, O bere o affogare and Pirandello, Lumíe di Sicilia (Ginn).

Reading of L'Italia by Wilkins and Marinoni (University of Chicago Press).

Tuesday, Thursday, and Saturday at 11.

ENGLISH LANGUAGE AND LITERATURE

PROFESSOR-George Herbert Clarke, M.A., D.Litt.

Professor-James Alexander Roy, M.A.

ASSOCIATE PROFESSOR-Henry Alexander M.A.

ASSISTANT PROFESSOR-Wilhelmina Gordon, M.A.

LECTURER-Robert W. Cumberland, M.A.

LECTURER-Magnus H. Irvine, M.C., M.A.

READERS—Celia B. File, Verna McClure, Agnes Prittie, R. O. Staples, H. A. Tanser.

TUTORS—Vera Des Brisay, Frank Rand, Jean Royce, Maude B. Whattam.

REGULATIONS

- 1. English 1 and 2 are required of all candidates for a degree in Arts. English 1 is a prerequisite for entrance to English 2, and English 2 is a prerequisite for entrance to all courses numbered higher.
- 2. Students making English their Minor subject must take courses 1 and 2 and four half-courses.
- 3. Students making English their Major subject must take courses 1 and 2 and six half-courses.
- 4. Students making English one of their two Honour subjects must take from six to ten half-courses in addition to courses 1 and 2. Their standing in English 2 must not be below the second division. After the completion of English 2, courses 10a and 14b must be taken by intra-mural students as soon as possible. In the ordinary sequence these and 18, 22a, 24b and 28 are third year courses, while 17a, 20b, 30, 33b, 35a, 36b, 40a, 41b, 43a, 44b, 45a, 46b are normally considered fourth year courses. Those who regard English as their chief Honours subject must take course 99, if considered eligible by the Department of English to do so.

COURSES OF INSTRUCTION

Note: Students in each of the following courses will be furnished with a list of recommended reference books in addition to those required.

ENGLISH 1. PROSE COMPOSITION, WITH LITERARY BACKGROUND.

A practical course in Prose Composition, with parallel reading. In the examination both knowledge of the texts and ability to write clearly and correctly will be required. Prescribed texts:

Norman Foerster and J. M. Steadman, Sentences and Thinking. (Boston: Houghton Mifflin Co.).

Richard Wilson, Précis Notes, and Summaries. (London and Toronto: Thomas Nelson & Sons).

Shakespeare, Romeo and Juliet, Arden Edition. (Boston: D. C. Heath & Co.).

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Modern Prose, King's Treasury Series. (London and Toronto: J. M. Dent & Sons).

Selected English Essays, King's Treasury Series. (London and Toronto: J. M. Dent & Sons).

Selected Short Stories, World's Classics, Nos. 193, 228 and 315. (Toronto: Oxford University Press).

In addition to the foregoing each student must possess a satisfactory English dictionary, preferably the *Concise Oxford Dictionary*. (Toronto: Oxford University Press).

Section A, Section B, Section C,

Tuesday, Thursday, and Saturday at 8.

ENGLISH 2. A GENERAL INTRODUCTION TO ENGLISH LITERATURE.

This course is intended to provide a general knowledge of the history and development of English Literature, and to lay a foundation for the advanced specialized courses. It deals both with periods and with types, and seeks to encourage in the student some critical appreciation of literary values. A distinction will be made in this course between the work required of students who intend to take honours in English and the work required of others.

Moody and Lovett, A History of English Literature, revised (1926). (New York: Charles Scribner's Sons).

Paul R. Lieder, Robert M. Lovett, and Robert K. Root, British Poetry and Prose (two vols.). (Boston: Houghton Mifflin Co.).

Section A, Section B, Monday, Wednesday, and Friday at 9. Section C, Section D, Tuesday, Thursday, and Saturday at 9.

ENGLISH 10a. OLD ENGLISH.

Outlines of Old English Grammar and Literature. Translation and study of selected passages. Prescribed text:

James W. Bright, An Anglo-Saxon Reader. (New York: Henry Holt & Co.).

Open only to Honours students.

Monday, Wednesday, and Friday at 9. Professor Alexander.

ENGLISH 14b. MIDDLE ENGLISH.

A brief survey of the most important transition texts after 1100 and the main linguistic changes. A study of Chaucer's development as a poet, based on a general knowledge of the following works: The Romaunt of the Rose, Book of the Duchesse, Parlement of Foules, Troilus and Criseyde, House of Fame, Prologue to the Legend of Good Women, The Canterbury Tales. Students must acquire a detailed knowledge of the Prologue to the Canterbury Tales, the Nonnes Preestes Tale, and the Prioress's Tale.

Prescribed texts:

The Works of Chaucer. (Toronto: Oxford University Press). Sisam, The Nun's Priest's Tale. (Toronto: Oxford University Press).

Open only to Honours students.

Monday, Wednesday, and Friday at 9.

Professor Alexander.

ENGLISH 17a. ENGLISH PROSODY.

A critical consideration of the principles and practice of English versification, with a special study of the development of the more familiar verse-forms.

Prescribed texts:

George Saintsbury, A Manual of English Prosody. (London and Toronto: The Macmillan Co.).

The Oxford Book of English Verse (Toronto: Oxford University Press).

Tuesday, Thursday and Saturday at 10(1929-1930), at 11(1930-1931).

Professor Clarke.

ENGLISH 18. SHAKESPEARE.

A review of the environment and life of Shakespeare, and of his development as a dramatist, with lectures on the lives and works of his chief forerunners and contemporaries. In the study of Shakespeare's works his chief comedies will be first considered, and thereafter his tragedies and last plays.

Prescribed texts:

George H. Cowling, A Preface to Shakespeare. (London: Methuen & Co.).

J. Q. Adams, The Life of William Shakespeare, Student's edition. (Boston: Houghton Mifflin Co.).

Shakespeare's Comedies; Shakespeare's Historical Plays; Shakespeare's Tragedies, Everyman edition. (Toronto: J. M. Dent & Sons).

A. C. Bradley, Shakespearean Tragedy. (New York and Toronto: The Macmillan Co.).

Monday, Wednesday, and Friday at 10.

Professor Clarke.

ENGLISH 20b. SPENSER AND MILTON.

This course is concerned chiefly with the poetic work of Spenser and of Milton, but it includes also a study of the Elizabethan and seventeenth century lyric and of some prose criticism.

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Open only to students who have taken English 18 or History 18. This course is given alternately with English 41b. Offered in 1929-1930, but not in 1930-1931, save extra-murally. Prescribed texts:

Edmund Spenser, *Poems*. (Any edition, preferably that published by the Oxford University Press).

John Milton, *Poems*. (Any edition, preferably that published by the Oxford University Press).

John Milton, Areopagitica. (Toronto: Oxford University Press).

Massingham, An Anthology of Seventeenth Century Verse. Golden Treasury Series. New York and Toronto: The Macmillan Co.).

Any anthology of English verse (such as the Oxford Book of English Verse, or Palgrave's Golden Treasury).

Recommended for extra-mural students: A Milton Handbook, by J. H. Hanford (New York: F. S. Crofts and Co.); Selected Essays of John Milton, ed. Laura E. Lockwood (Boston: Houghton Mifflin Co.).

Tuesday, Thursday, and Saturday at 10.

Professor Gordon.

ENGLISH 22a. THE EIGHTEENTH CENTURY.

The chief literary movements from 1660 to 1786 will be studied. Special attention will be given to the work of the following authors: Dryden, Pope, Prior, Gay, Johnson; Thomson, Collins, Gray, Cowper, Burns; Swift, Addison, Steele; Defoe, Richardson, Fielding, Sterne, Goldsmith; Lady Mary Wortley Montague, Horace Walpole, Chesterfield; Gibbon, Burke; Boswell. Prescribed texts:

James, The Age Revealed. (Toronto: Thomas Nelson).

John Bailey, A Shorter Boswell. (Toronto: Thomas Nelson).

Guy Boas, Gray, Collins, Goldsmith and Cowper (Toronto: Thomas Nelson).

Sir Leslie Stephen, English Literature and Society in the Eighteenth Century. (London: Duckworth).

Dryden, Poems. (Oxford edition).

Pope, *Poems* (Globe edition), (New York and Toronto: The Macmillan Co.).

W. C. Hazlitt, Lectures on the English Poets, Everyman edition. (Toronto: J. M. Dent & Sons).

Tuesday, Thursday, and Saturday at 9.

Professor Roy.

ENGLISH 24b. THE ROMANTIC REVIVAL.

The works of such representative authors as the following will be studied: Wordsworth, Coleridge, Southey; Scott; Crabbe; Byron, Keats, Shelley; Landor; Moore, Campbell; Hazlitt, Lamb. De Quincey. Prescribed texts:

- English Critical Essays of the Nineteenth Century. (Toronto: Oxford University Press).
- Guy Boas, Wordsworth and Coleridge Contrasted. (Toronto: Thomas Nelson).
- Guy Boas, Keats and Shelley Contrasted. (Toronto: Thomas Nelson).
- H. N. Brailsford, Shelley, Godwin and their Circle, Home University Library. (New York: Henry Holt & Co.).
- W. C. Hazlitt, The Spirit of the Age, Everyman edition. (Toronto: J. M. Dent & Sons).
- William Wordsworth, Poems. (Oxford edition).
- Any editions of the Poetical Works of Coleridge, Scott, Byron, Shelley and Keats.

Tuesday, Thursday, and Saturday at 9.

Professor Roy.

ENGLISH 28. THE VICTORIAN ERA.

A study of the chief trends of thought and experience during the Nineteenth Century, as exemplified in the works of the greater prose masters and poets of the Victorian Era. Offered in 1929-1930, but not in 1930-1931.

Prescribed texts:

- W. C. Brownell, Victorian Prose Masters. (New York: Charles Scribner's Sons).
- R. M. Alden, Readings in English Prose of the Nineteenth Century, Part II. (Boston: Houghton Mifflin Co.).
- Sir A. Quiller-Couch, The Oxford Book of Victorian Verse. (Toronto: Oxford University Press).
- Any editions of the Poetical Works of Tennyson, Clough, Arnold, Browning, Rossetti and Swinburne.

Tuesday, Thursday, and Saturday at 11. Professor Gordon (first term) and Professor Clarke (second term).

ENGLISH 30. TWENTIETH CENTURY LITERATURE.

A study of recent literary tendencies, particularly in modern poetry, as exemplified in the poetic works of Hardy, Masefield, Bridges, Phillips, Watson, Kipling, De la Mare, and others.

ENGLISH 111

Open only to students who have taken English 28. This course is given alternately with English 35a and 36b. Offered in 1930-1931, but not in 1929-1930.

Monday, Wednesday, and Friday at 11.

Professor Clarke.

ENGLISH 33b. THE POETRY OF ROBERT BROWNING.

An intensive study of Browning's chief dramatic monologues, dramas, and The Ring and the Book.

Offered in 1930-1931, but not in 1929-1930.

Tuesday, Thursday, and Saturday at 11.

Professor Clarke.

ENGLISH 35a. AMERICAN LITERATURE.

This course rapidly surveys the field indicated, emphasizing the work of Irving, Cooper, Bryant, Poe, Emerson, Hawthorne, Lanier, Whitman, Mark Twain, Henry James, and other writers. Offered in 1929-1930, but not in 1930-1931.

Prescribed texts:

W. C. Bronson, A Short History of American Literature. (Boston: D. C. Heath & Co.).

Norman Foerster, American Poetry and Prose. (Boston: Houghton Mifflin Co.).

Monday, Wednesday, and Friday at 11.
Professor Clarke.

ENGLISH 36b. CANADIAN LITERATURE.

This course surveys the field of Canadian Literature, historically and critically. Offered in 1929-1930, but not in 1930-1931.

Prescribed texts:

Ray P. Baker, A History of English-Canadian Literature to the Confederation. (Cambridge: Harvard University Press).

Archibald McMechan, Headwaters of Canadian Literature. (Toronto: McClelland and Stewart).

Raymond Knister, Canadian Short Stories. (Toronto: The Macmillan Company).

Hugh Eayrs, Modern Canadian Poets. (Toronto: The Macmillan Company).

E. K. and E. H. Broadus, A Book of Canadian Prose and Verse. (Toronto: The Macmillan Company).

Monday, Wednesday, and Friday at 11.

Professor Clarke.

ENGLISH 40a. THE EARLIER ENGLISH NOVEL.

A history of the development of the English novel to the middle of the Nineteenth Century.

Open only to students who have taken English 22a.

Offered in 1930-1931, but not in 1929-1930.

Tuesday, Thursday and Saturday at 10.

Professor Gordon.

ENGLISH 41b. THE LATER ENGLISH NOVEL, AND THE SHORT STORY.

A study of the English Novel and Short Story of the later Nineteenth Century and the Twentieth Century.

Open only to students who have taken English 40a. This course is given alternately with English 20b. Offered in 1930-1931, but not in 1929-1930.

Tuesday, Thursday, and Saturday at 10.
Professor Gordon.

ENGLISH 43a. MODERN EUROPEAN DRAMA.

A consideration of the work and influence of such representative writers as Ibsen, Björnson; Strindberg; Hervieu, Brieux, Rostand; Maeterlinck, Verhaeren; Heijermans; Tolstoi, Gorky, Chekhov, Andreyev; Hauptmann, Sudermann, Wedekind, Toller, Kaiser; Bahr, Schnitzler, von Hofmannsthal; Molnar; D'Annunzio, Pirandello; Echegaray, Benavente, Guimara.

This course is given alternately with 45a. Offered in 1930-1931, but not in 1929-1930.

Monday, Wednesday, and Friday at 10.

Professor Roy.

ENGLISH 44b. MODERN ENGLISH DRAMA.

A study of the development of English drama from the Victorian Era until the present. The work and influence of the following dramatists will be considered: Knowles, Bulwer-Lytton, T. W. Robertson; Pinero, Jones, Wilde, Shaw, Galsworthy, Barker; Phillips; Hankin, Masefield, Houghton, Maugham; Barrie; Yeats, Synge, Lady Gregory, Moore, Dunsany, Ervine.

This course is given alternately with 46b. Offered in 1930-1931, but not in 1929-1930. Open only to students who have taken English 43a.

Monday, Wednesday, and Friday at 10.

Professor Roy.

ENGLISH 45a. RESTORATION AND EIGHTEENTH CENTURY DRAMA.

This course is given alternately with English 43a. Offered in 1929-1930, but not in 1930-1931. Prescribed texts:

D. H. Stevens, Types of English Drama, 1660-1780. (Boston and New York: Ginn & Co.).

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G. H. Nettleton, English Drama of the Restoration and Eighteenth Century. (New York and Toronto: The Macmillan Co.).

Monday, Wednesday, and Friday at 10.

Professor Roy.

ENGLISH 46b. THE ENGLISH ESSAY FROM 1600 UNTIL THE PRESENT.

This course is given alternately with English 44b. Offered in 1929-1930, but not in 1930-1931.

Prescribed texts:

J. H. Lobban, English Essays. (London: Blackie & Son).

Sir Henry Newbolt, Essays and Essayists. (London and Toronto: Thomas Nelson).

Orlo Williams, The Essay. (New York: George H. Doran Co.). Wann, Century Readings in the English Essay. (New York: The Century Co.).

Monday, Wednesday, and Friday at 10.

Professor Roy.

English 99. Reading Course and Seminar for Honours Students.

Seminars, consisting ordinarily of about twelve meetings of two hours each during the academic year, will be arranged at suitable hours and dates in the subjects indicated below. A large amount of reading and some independent investigation are required of each student, and the results of such work must be communicated to the seminar in the form of reports or essays. This course must be taken during the student's final year.

SEMINARS

(1) BEOWULF.

Open only to students who have taken English 10a.

Professor Alexander.

(2) ELIZABETHAN DRAMA OTHER THAN SHAKESPEARE.

Open only to students who have taken English 18.

Professor Gordon.

(3) SHELLEY AND KEATS.

Open only to students who have taken English 22a and 24b.

Professor Clarke.

(4) DICKENS AND THACKERAY.

Open only to students who have taken English 28 or 40a.

Professor Roy.

HISTORY

PROFESSOR OF HISTORY AND DOUGLAS PROFESSOR OF CANADIAN AND COLONIAL HISTORY— Duncan McArthur, M.A., F.R.S.C.

ASSOCIATE PROFESSOR-Reginald G. Trotter, Ph.D.

ASSOCIATE PROFESSOR-A. E. Prince, M.A.

LECTURER IN THE HISTORY OF THE UNITED STATES-John P. Pritchett, M.A.

SIR JAMES AIKINS FELLOW-Alice Oswald, B.A.

TUTORS-Maud Whattam.

D. R. Falconer.

REGULATIONS

- 1. All students proceeding to advanced work in History must take any two courses from History 1, 2 and 3. History 3 must be chosen if History 13 is included.
- 2. A minor in History consists of Hitory 1, 2 or 3 and two other courses chosen from 2, 3, 4, 12, 13, 16, and, with the consent of the Department, 14a and 15b. A major in History consists of one additional course.
- 3. Candidates for Honours will ordinarily select one of the following options according as they emphasize Canadian or European History:

A. History 2, 3, 13, and from two to four other courses approved by the Department.

B. History 1, 2, 16, and from two to four other courses approved by the Department.

4. Any half-courses in the department of Economics which deal with economic history or constitutional law and practice may be counted as half-courses in History. But in all such cases, the student will consult the Professor of History.

5. A knowledge of historical geography is required in all classes. The most accessible atlases are:

Ramsay Muir, Philips' New Historical Atlas for Students (Geo. Philips & Son).

The Everyman Literary and Historical Atlas of Europe (Dent).

E. W. Dow, Atlas of European History (Holt & Co.).

F. W. Putzger, Historischer Schul-Atlas (Leipsig).

W. R. Shepherd, Historical Atlas (Holt & Co.).

Burpee, Historical Atlas of Canada (Nelson)

HISTORY 1. EUROPEAN HISTORY FROM THE RENAISSANCE TO THE CONGRESS OF VIENNA—1453-1815.

The following subjects will be discussed in the lectures: The Italian and trans-Alpine Renaissance; the Spread of the Reformation; the Hapsburg Ascendancy; the Thirty Years' War; the

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Age of Louis XIV; the Evolution of Prussia; the Rise of Russia; the Partitions of Poland; the Enlightenment and the Enlightened Despots; the French Revolution; the Napoleonic Era.

Hayes, Political and Social History of Modern Europe, Vol. I. (Macmillan). (1929-30).

W. H. Hudson, Story of the Renaissance (Cassell).

Fisher, Napoleon (Home University Library, Williams and Norgate).

For extra-mural students the following books are also required:

H. L. Hoskins, Outline of Modern European History (Doubleday, Page).

W. C. Abbott, Expansion of Europe (Holt).

Tuesday, Thursday, and Saturday at 11. Professor Prince.

HISTORY 2. BRITISH HISTORY SINCE 1714.

The lectures will deal with such topics as the following: The Hanoverian succession as the corollary of the Revolution of 1688; the development of party government and the cabinet; Imperial expansion and dismemberment; eclipse of the Whigs; the French Revolution and domestic reaction; the Industrial and Social Revolutions; the democratization of the constitution; the growth and government of the new Empire; Ireland; Britain and the Powers in the nineteenth century; the Empire in the World War; problems of peace and reconstruction.

- T. F. Tout, Advanced History of Great Britain, Part III (Longmans). (1929-30).
- A. S. Turberville, English Men and Manners in the Eighteenth Century (Oxford Press). (1929-30).
- G. M. Trevelyan, British History in the Nineteenth Century (Longmans). (1929-30).

For extra-mural students the following books are also required: W. T. Morgan, A Guide to the Study of English History (Knopf).

- M. D. George, English Social Life in the Eighteenth Century (Macmillan). (1929-30).
- G. G. Andrews, Parliamentary Reform in England, 1830-1832, (Crofts) (1929-30).
- E. Rhys, editor, The Growth of Political Liberty: A Source Book of English History, (Everyman's Library: Dent). (1929-30).

Tuesday, Thursday, and Saturday at 8. Professor Trotter.

HISTORY 3. COLONIAL HISTORY.

Lectures will be given on the general course of Colonial Development down to 1783. These will treat of the trade routes of the Old World; the voyages of discovery; the growth of theories of colonization; Spain, France, and England in America, and the reaction of the new world upon the old; the Old Colonial system and its breakdown after the Seven Years' War; the American Revolution. Some of the more significant phases of the history of Canada to 1841 will be discussed.

Cheyney, European Background of American History.

Bourne, Spain in America.

Becker, Beginnings of the American People.

Tyler, England in America (Harpers).

McArthur, History of Canada (Gage).

For extra-mural students the following books are also required: Andrews, Colonial Self-Government, and Howard, Preliminaries of the Revolution, both in The American Nation Series (Harpers).

Monday, Wednesday, and Friday at 11. Professor McArthur.

HISTORY 4. GREEK AND ROMAN HISTORY.

Greek History. Bury, History of Greece; as an introduction to the subject the first two Parts of Breasted, Ancient Times, should be read.

Roman History. A general account of the history and culture of Rome, down to the extinction of the Empire in the West 476 A.D., based on A History of Rome, by A. E. R. Boak (Macmillan).

Other manuals recommended are Shuckburgh, History of Rome, or Pelham, Outline of Roman History, and Stuart Jones, Roman Empire.

Tuesday, Thursday, and Saturday at 11.

HISTORY 12. MEDIAEVAL EUROPEAN HISTORY, 300-1453.

The following subjects will be discussed in the lectures:—The Decline of Roman Civilization and Government in the West; the Barbarian Invasions; the Germanic Kingdoms; Monasticism, the Papacy, and the Expansion of the Church; the Rise of the Frankish Empire; the New Invaders—Norsemen, Magyars, Saracens; the Holy Roman Empire; the Capetian Monarchy; Cluny, Hildebrand, and the Investiture Controversy; Feudalism, Chivalry, the Crusades; the Hundred Years' War; Towns and Economic Development; the Universities, the Friars, the Scholastics; the Conciliar Movement.

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H. W. C. Davis, Mediaeval Europe (Home University Library).

D. C. Munro and R. J. Sontag, The Middle Ages, 395-1500. (Century). (1929-30).

Thatcher and McNeal, Source Book of Medieval History (Scribners).

For extra-mural students the following text is also required:

J. Bryce, Holy Roman Empire (Macmillan).

Monday, Wednesday, and Friday at 9. Professor Prince.

HISTORY 13. THE DEVELOPMENT OF BRITISH COLONIAL POLICY

The following subjects will be discussed in the lectures: The causes of early overseas settlement; the relation of the colonies to the Crown and parliament; the colonial policy of Cromwell; the restoration and extension of royal government; the revolution of 1688 and colonial policy; the governor and colonial assemblies; the causes of the loss of the American colonies; the influence of the American situation on British colonial policy; the Industrial Revolution and emigration; settlement in Australia and New Zealand; Gibbon Wakefield; the problem of colonial self-governernment in the West Indies, Canada, Australia, New Zealand, and South Africa; the expansion of the Empire; the Empire and British foreign policy; India, Egypt and the Near East; the government of the Empire; the Colonial and Imperial Conferences, the League of Nations and the Empire; The Imperial Conference of 1926.

Texts:

Robinson, The Development of the British Empire (Houghton Mifflin).

- H. E. Egerton, A Short History of British Colonial Policy (Methuen).
- G. L. Beer, The Origins of the British Colonial System, 1578-1660 (Macmillan).

The Old Colonial System (Macmillan).

British Colonial Policy, 1754-1765 (Macmillan).

- H. E. Egerton, The American Revolution (Oxford).
- A. B. Keith, Selected Speeches and Documents on British Colonial Policy, 1763-1917 (Oxford).
- H. E. Egerton, British Colonial Policy in the Twentieth Century (Methuen).

Monday, Wednesday, and Friday at 10. Professor McArthur.

HISTORY 14a. EUROPE SINCE 1815.

The following subjects will be discussed in the lectures: The heritage of the French Revolution; the "Confederation of Europe"; the Metternich System; the Industrial Revolution; liberal and re-

publican movements; the second French Empire; the Unification of Germany and the Franco-Prussian War; the extension of Russia; the Near Eastern Question and the Congress of Berlin; Imperial Germany; the third French Republic; Austria and Russia at the end of the century; Great Britain's rôle in nineteenth century Europe; the "Expansion of Europe"; international rivalries and the Balance of Power in the Concert of Europe; the Great War and the new nations; the League of Nations.

- J. S. Schapiro, Modern and Contemporary European History (Houghton, Mifflin). (1929-30).
- W. P. Hall and E. A. Beller, Historical Readings in Nineteenth Century Thought (Century Co.). (1929-30).
- J. H. Robinson and C. A. Beard, Readings in Modern European History, Vol. II (Ginn) (1929-30).
- For extra-mural students the following books are also required: H. L. Hoskins, An Outline of Modern European History (Dou
 - bleday, Page and Co.).
 - A. Oakes and R. B. Mowat, The Great European Treaties of the Nineteenth Century (Oxford Press. (1929-30).

Monday, Wednesday, and Friday at 11. Professor Trotter.

HISTORY 15b. THE NEAR EASTERN QUESTION.

A study in the relations between the Occident and Orient, Christianity and Islam. The topics discussed will include the following: the Byzantine Empire and its eclipse by the Turks; Europe's peril from the Ottoman, and the "crusades" of Spain, Austria and Russia; the dismemberment of Turkey by Balkan nationalism; the Congress of Berlin; German imperialism and the "Young Turks"; the Balkan Wars; Turkey and the Great War; the Arab revival; Zionism and Palestine; the Kemal "Nationalist" movement and Lausanne; the rebirth of Turkey; the revolt of Islam against Western European control.

- J. A. R. Marriott, The Eastern Question (Oxford University Press).
- A. J. Toynbee and K. P. Kirkwood, Turkey (Scribners).

 Monday, Wednesday, and Friday at 11. Professor Prince.

HISTORY 16. MEDIAEVAL ENGLISH HISTORY.

An introductory study of the development of England and English institutions up to 1485. The topics discussed will include the following: Early invaders; the Romans in Britain; the Teutonic conquest and settlement; the origins and growth of the Anglo-Saxon constitution; the Danes and Alfred the Great; the Norman Conquest; Church and State; Feudal institutions; the rise of Parliament; the development of the administrative system;

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Edwardian wars against Scotland and France; the Lancastrian Constitutional experiment; the Lollards; the Wars of the Roses; social England in the later Middle Ages.

- T. F. Tout, Advanced History of Great Britain, Pt. I. (1929-30).
- G. B. Adams, Constitutional History of England (Holt), or
- T. P. Taswell-Langmead, English Constitutional History, or
- D. J. Medley, Student's Manual of English Constitutional History.
- G. B. Adams and H. M.. Stephens, Select Documents of English Constitutional History (Macmillan). (1929-30).
- For extra-mural students the following books are also required: W. T. Morgan, A Guide to the Study of English History (Knopf).
 - C. Petit-Dutaillis, Studies Supplementary to Stubbs' Constitutional History, Vol. I (Manchester).

Tuesday, Thursday, and Saturday at 9. Professor Prince. HISTORY 18a. ENGLAND UNDER THE TUDORS, 1485-1603.

The following subjects will be discussed in the lectures: The nature of the Tudor "popular absolutism"; Henry VII and the establishment of strong government; the New Learning and the Oxford Reformers; Henry VIII and the revolt from Rome; the Protestant Reformation under Edward VI; the restoration of Catholicism under Mary; Elizabeth's ecclesiastical "middle way"; Elizabeth as a diplomatist; Elizabeth and Mary Queen of Scots and the Catholic Revival; the Tudor navy and maritime activity; Philip II and the Spanish Armada; commercial and colonial enterprise; social and economic progress at home; the Irish problem under the later Tudors; the "Age of Shakespeare"; the beginnings of Puritanism and parliamentary resistance to autocracy.

- H. A. L. Fisher, Political History of England, 1485-1547 (Longmans) (1929-30).
- A. F. Pollard, Political History of England, 1547-1603 (Longmans) (1929-30).
- G. B. Adams and H. M. Stephens, Select Documents of English Constitutional History (Macmillan). (1929-30).
- For extra-mural students the following books are also required: W. T. Morgan, A Guide to the Study of English History
 - W. I. Morgan, A Guide to the Study of English History (Knopf).
 - T. F. Tout, Advanced History of Great Britain, Part II (Longmans), (1929-30).
 - G. B. Adams, Constitutional History of England (Holt).
 - F. W. Tickner, A Social and Industrial History of England (Arnold in England, Longmans in Canada). (1929-30).

 Tuesday, Thursday, and Saturday at 9. Professor Trotter.

HISTORY 19b. ENGLAND UNDER THE STUARTS, 1603-1714.

The following subjects will be discussed in the lectures: Constitution and nation at the beginning of the seventeenth century; the clash of King and Parliament; the personal rule of Charles I; the Puritan Revolution and the republican experiment under Cromwell; the Stuart Restoration and the Whig Revolution of 1688; the rise of political parties; overseas expansion under the Stuarts; social and cultural aspects of the period.

- G. M. Trevelyan, England under the Stuarts (Methuen).
- Sir Charles Firth, Oliver Cromwell and the Rule of the Puritans in England (Putnam).
- G. B. Adams and H. M. Stephens, Select Documents of English Constitutional History (Macmillan). (1929-30).

For extra-mural students the following books are also required:

- W. T. Morgan, A Guide to the Study of English History (Knopf).
- T. F. Tout, Advanced History of Great Britain, Part II (Longmans) (1929-30).
- G. B. Adams, Constitutional History of England (Holt).
- F. W. Tickner, A Social and Industrial History of England (1929-30).

Tuesday, Thursday, and Saturday at 9. Professor Trotter.

HISTORY 20a. THE BASIS OF FRENCH CANADIAN NATIONALITY: a study of French civilization in Canada in the seventeenth and eighteenth centuries.

This class will deal with: The French institutions in Church and State transferred to Canada in the 17th century; the Jesuit missions; Laval, and the Roman Catholic Church in Canada; Louis XIV and the colonial policy of Colbert; Talon and Royal control; French feudalism in Canada; the fur trade in relation to the expansion of New France; La Salle and western exploration; the relations between New France and New England; the conflict of interest of France and England in America; the Seven Years' War in America.

Munro, The Seignioral System in Canada.

Parkman, The Pioneers of France in the New World; The Jesuits in North America; The Old Régime; Count Frontenac; La Salle; A Half Century of Conflict; Montcalm and Wolfe.

And contemporary sources to be assigned in class.

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Books of reference on French History (1600-1763):

Grant, The French Monarchy.

Lavisse, Histoire de France, tomes 6-8.

Lodge, Richelieu.

Cambridge Modern History, vol. 5, The Age of Louis XIV.

Tuesday, Thursday, and Saturday at 10. Professor McArthur.

HISTORY 21b. FRENCH AND BRITISH IN CANADA—THE FIRST PHASE, 1760-1812.

This class will deal with: The first days of British rule; the administrations of Murray and Dorchester; the Quebec Act; Canada and the American War; the United Empire Loyalists, their settlement and influence on Canadian development; the Constitutional Act and the division of the Province; Parliamentary institutions in Lower and Upper Canada; the war of 1812.

Lucas, A History of Canada, 1763-1812.

Shortt and Doughty, Documents relating to the Constitutional History of Canada, 1759-91.

Doughty and McArthur, Documents relating to the Constitutional History of Canada, 1791-1818.

Chapais, Cours d'histoire du Canada.

Books of reference:

Canada and Its Provinces, vol. 3.

Bradley, Lord Dorchester.

Tuesday, Thursday, and Saturday at 10. Professor McArthur.

HISTORY 25. UNITED STATES HISTORY.

A survey course covering the national period. Emphasis is placed upon constitutional development and such other phases of the growth as help to explain the political and social problems of the present. The following leading national themes are stressed: The structure of the government, foreign relations, the growth of national feeling, the Monroe Doctrine, westward extension, the slavery question, the Civil War, Reconstruction, financial problems, political reforms, labor and capital, the growth and regulation of corporations, the Spanish-American War and territorial expansion, the United States and the World War, the United States since the war.

Hockett and Schlesinger, Political and Social History of the United States (Macmillan).

Macdonald, Documentary Source Book of American History, 1606-1926 (Macmillan).

Tuesday, Thursday, and Saturday at 11. Mr. Pritchett.

HISTORY 30a. THE STRUGGLE FOR RESPONSIBLE GOVERNMENT IN CANADA, 1812-1849.

This is an advanced course and may be offered as part of the work for the degree of M.A. The lectures and seminars will deal with the following subjects: The social and economic causes of discontent; Robert Gourlay; self-government in the Maritime Provinces; early investigations and proposals of reform; the Constitutional Party; Mackenzie and Papineau; the Rebellion of 1837; the Durham Mission and Report; the Union of the Canadas; Sydenham and reconstruction; liberalism and reaction as represented by Bagot and Metcalfe; the work of Lord Elgin; British policy; the Rebellion Losses Bill and the adoption of the practice of Responsible Government.

Doughty and McArthur, Documents relating to the Constitutional History of Canada, 1791-1818.

Lucas, Lord Durham's Report, Vols. I and II.

The lives of Mackenzie, Papineau, Baldwin, Lafontaine, Wilmot, Tilley, Hincks, Sydenham and Elgin in The Makers of Canada.

Morison, British Supremacy and Canadian Self Government (Gundy),

and other contemporary sources to be assigned during the course.

Tuesday, Thursday, and Saturday at 11. Professor McArthur.

HISTORY 31b. CANADIAN DEVELOPMENT, SINCE 1849.

The development of party government; economic conditions; Reciprocity with the United States; Canada and the American Civil War; the Confederation Movement—its origin and development; the Canadian Confederation; the problems of the Dominion; Western expansion; railway development; the National Policy; Provincial rights; the rise of Laurier; immigration and expansion; Imperial problems; Canada and the Colonial and Imperial Conferences; the Great War and its influence on Canadian status and development.

This course is open only to honours and graduate students except by special permission of the instructor. It is conducted as a seminar, attention being given to the problem of historical method and to the bibliography of Canadian history for the period studied, and each student presenting to the class reports on special topics based so far as possible upon intensive research in the contemporary sources. In addition to the research on their

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special topics students are expected to make themselves familiar with the general history of the period, for which purpose they will read with special care the prescribed texts. For such other reading as opportunity affords they are advised to refer specially to such works as those listed below as books of reference. Required texts:

- R. G. Trotter, Canadian History: A Syllabus and Guide to Reading (Macmillan).
- R. G. Trotter, Canadian Federation: Its Origins and Achievement (Dent).
- O. D. Skelton, Life and Letters of Sir Wilfrid Laurier (Gundy). Books of reference:
 - J. Pope, Memoirs of Sir John A. Macdonald.
 - O. D. Skelton, Life and Times of Sir A. T. Galt.

Isabel Skelton, Life of Thomas D'Arcy McGee.

Lives of men of the period in The Makers of Canada.

Tuesday, Thursday, and Saturday at 11. Professor Trotter.

POLITICAL AND ECONOMIC SCIENCE

PROFESSOR-W. A. Mackintosh, M.A., Ph.D.

ASSOCIATE PROFESSOR-C. E. Walker, B.Sc.Acc., C.A.

ASSOCIATE PROFESSOR-R. G. H. Smails, B.Sc. (Econ.), A.C.A.

ASSISTANT PROFESSOR-C. A. Curtis, Ph.D.

ASSISTANT PROFESSOR-F. A. Knox, B.A.

LECTURER -H. F. Sutherland, M.A.

LECTURER-M. K. INMAN, M.A.

TUTORS—R. O. Merriman, M.A., J. C. Ingram, B.A., J. L. McLennan, B.A., A. S. Haydon, B.A.

REGULATIONS

- 1. Students taking only one course in this subject must choose either Economics 1 or Economics 2; it is not necessary to take Economics 1 before Economics 2. Students taking two courses should select them from Economics 1, 2, and 4.
- 2. Students on a Pass Course who choose this subject as their Minor must take Economics 1, 2, 4, and one other course.
- 3. Students on a Pass Course who choose this subject as their Major must take the work in paragraph 2 and two additional half-courses.
- 4. Students seeking Honours in this subject are required to take from five to seven full courses or their equivalent, including Economics 1 and 2, 10 or 30, and one of the following groups: (a) 32, 33 or 35; (b) 25, 15 or 16, 23 or 24. Those making Economics their main subject must include course 90 or 91.
- 5. For requirements for the B.Com. degree, consult the special announcement of the courses in Commerce and Administration.
- 7. Courses 1, 2, 4, 10, and 30 are whole courses, running throughout the year; all others are ordinarily given as semester or half-courses, though certain related courses may be required to be taken in sequence.

Courses 1-9 are introductory; 1 and 2 are fundamental for both Pass and Honour students; courses 3 to 9 are not open to Honour students. Courses 10 to 29 deal with economic and 30 to 49 with political and social questions; 50 to 69 are Commerce and Administration courses. Students in Arts may not choose more than two half-courses from the subjects numbered 50-63 as they appear in this Calendar. A list of the courses to be offered in this and succeeding years follows:

- 1. Introduction to Economics.
- 2. Introduction to Politics.
- 4. Descriptive Economics.
- 5. Principles of Economics.
- 10. Economic Theory
- 12. Socialism and Relation of the State to Industry.
- 13. Labor Problems.
- 15. Economic History, United Kingdom and Europe.
- 16. Economic History, Canada and the United States.
- 19. Statistical Theory and Method.
- 20. Competition and Monopoly.
- 21. Economics of Transportation.
- 22. Economics of Agriculture.
- 23. International Trade and Tariff Policy.
- 24. Public Finance and Taxation.
- 25. Money and Banking.
- 28. Advanced Banking.
- 30. Political Theory since 1800.
- 32. International Law and Organization.
- 33. Imperial Relations.

- 35. Canadian Government and Constitutional Law.
- 36. Government of the British Isles.
- 37. Governments of Continental Europe.
- 38. Government of United States.
- 39. Modern Democracies.
- 40. Municipal Government.
- 41. National Problems.
- 42. Population Problems.

 Commerce and Administration.
- 50. Industrial Management.
- 52. Principles of Marketing.
- 53. Marketing, Foreign.
- 54. Business Finance.
- 55. Investments.
- 57. Business Statistics.
- 59. Business Policy.
- 60. Commercial Law.
- 63. Elements of Accounting.
- 64. Intermediate Accounting.
- 65. Intermediate Accounting.
- 67. Auditing.
- 90. Contemporary Political Theory
- 91. Business Cycles.

ECONOMICS 1. INTRODUCTION TO ECONOMICS.

A general discussion of the principles governing the production, consumption, exchange and distribution of wealth, and the application of economic principles to such concrete problems as money, banking, taxation, trusts, the tariff, and the labor movement.

All students in this course who are not taking Economics 4 are required to read Gras, Introduction to Economic History (Harpers).

Taussig, Principles of Economics (Macmillan).

Day and Davis, Questions on the Principles of Economics, (Macmillan).

Monday, Wednesday, and Friday at 8. Professor Mackintosh and members of the Department.

ECONOMICS 2. INTRODUCTION TO POLITICS.

An approach to the study of the state, its origin, form, activities, and international relations, and a study of the working of governments, particularly those of Great Britain, the United States and the British Dominions.

Morris, History of Political Ideas (Christophers). Read, International Law and International Relations. Mill, Representative Government (Everyman).

Monday, Wednesday, and Friday at 10. Mr. Sutherland.

ECONOMICS 3. ECONOMICS FOR APPLIED SCIENCE STUDENTS.

Monday and Wednesday at 9. Professor Walker.

ECONOMICS 4. DESCRIPTIVE ECONOMICS.

A comprehensive study of the development of modern industry, its organization and resources.

Gras, Introduction to Economic History (Harpers).
Whitbeck and Finch, Economic Geography (McGraw-Hill).

Tuesdya, Thursday, and Saturday at 9. Mr. Inman.

ECONOMICS 5b. ECONOMIC PROBLEMS.

This course is designed for Pass students in Arts and students in Commerce. A more detailed and fundamental consideration will be given to the problems taken up in Economics 1. The course should be taken in the fourth year.

Prerequisites: Economics 1 and 4.

Vanderblue, Economic Principles, A Case Book (A. W. Shaw).

Tuesday, Thursday, and Saturday at 10. Professor Knox.

ECONOMICS 10. ECONOMIC THEORY.

An historical and critical study of economic theory. For Honour students only.

Adam Smith, Wealth of Nations (Everyman edition).

Ricardo, Principles of Political Economy (Everyman edition).

Mill, Principles of Political Economy (Longmans).

Marshall, Principles of Economics (Macmillan).

Taussig, Principles of Economics (Macmillan).

Cassel, Theory of Social Economy (Harcourt Brace).

Monday, Wednesday, and Friday at 10. Professor Mackintosh.

ECONOMICS 12a. SOCIALISM.

A study of socialist analyses of our economic organization and of socialist progress.

Tuesday, Thursday, and Saturday at 10. Professor Knox.

ECONOMICS 16a. ECONOMIC HISTORY OF UNITED STATES AND CANADA.

(Offered in 1929-30 but not in 1930-31).

A comparative study of the development of North American communities from colonial to metropolitan economy.

Falkner, American Economic Development (Harpers).

Assigned Readings.

Monday, Wednesday, and Friday at 9. Professor Mackintosh.

ECONOMICS 19a. STATISTICAL THEORY AND METHOD.

A course in the collection, analysis, and charting of statistical data. Special attention will be given to graphic and diagrammatic presentation.

Mills, Statistical Methods (Holt).

Monday, Wednesday, and Friday at 10. Professor Curtis.

ECONOMICS 23b. INTERNATIONAL TRADE.

Theory of international trade, foreign exchanges, international price changes, and tariff problems.

Taussig, International Trade.

(Offered in 1929-30 but not in 1930-31).

Tuesday, Thursday, and Saturday at 11. Professor Knox.

ECONOMICS 24b. PUBLIC FINANCE.

A general survey of the financial problems of government. Lutz, Public Finance (Appletons).

Assigned Readings.

Monday, Wednesday, and Friday at 9. Mr. Inman.

ECONOMICS 25a. MONEY AND BANKING.

A general survey of the modern financial system. Money and credit, commercial banks, investment banks, trust companies, savings banks, loan and mortgage companies, co-operative credit institutions, stock exchanges and the other institutions which make up the present financial structure, will be studied with a view to ascertaining the functions which they perform, their relations to one another and to the economic system as a whole. A brief comparative study of the commercial banking systems of England, Scotland, France, Germany, United States, and Canada will also be made.

Dunbar, The Theory and History of Banking (G. P. Putnam's Sons, New York and London).

The Canadian Bank Act.

Burgess, Federal Reserve Banks and the Money Market (Harpers).

Readings in Money and Banking furnished through the Department.

Extra-mural students should also obtain

Moulton, Financial Organization of Society (The University of Chicago Press).

Lehfeldt, Money (Oxford Univ. Press).

Tuesday, Thursday, and Saturday at 11. Professor Knox.

ECONOMICS 32. INTERNATIONAL LAW AND ORGANIZATION.

A critical and historical study of international relations; a more detailed study of contemporary problems.

Woolf, International Government (Allen and Anwird).

Pollock, The League of Nations (Stevens and Sons).

Assigned Readings.

(Offered in 1929-30 but not in 1930-31).

Monday, Wednesday, and Friday at 9. Mr. Sutherland. Economics 39. Modern Democracies.

A criticism of democratic institutions based upon a detailed examination of the theory and practice of modern democratic government.

This course may be taken as a half course of the first term or as a half course of the second term or as a full course.

Bryce, Modern Democracies (Macmillan).

Lowell, Public Opinion and Popular Government.

Lewis, Party Principles and Practical Politics (Prentice-Hall). Assigned Readings.

(Offered in 1929-30 but not in 1930-31).

Tuesday, Thursday, and Saturday at 11. Mr. Sutherland. For details of Courses 50-67 see the Calendar of the courses in Commerce and Administration.

ECONOMICS 90. CONTEMPORARY POLITICAL THEORY.

Students will read the works of Laski, Maciver, Wallas, Cole, and examine the viewpoint of Communism and Fascism. They will be expected to choose one topic out of the general subject, and prepare a lengthy essay on it.

Students who lack a knowledge of Philosophy are advised to read Joad, Introduction to Modern Philosophy.

Mr. Sutherland.

ECONOMICS 91. BUSINESS CYCLES.

A seminar course dealing with the economic problems of a dynamic capitalistic society, as shown in the phenomena of business cycles.

Mitchell, Business Cycles.

Professors Mackintosh and Kuox.

MENTAL AND MORAL PHILOSOPHY

PROFESSOR OF PHILOSOPHY—George Humphrey, M.A., Ph.D. ASSOCIATE PROFESSOR—Reginald Jackson, M.A. TUTORS—to be appointed.

REGULATIONS

- 1. Every candidate for the B.A. degree must take either Philosophy 1 or Philosophy 2. Enrolment in these courses will be approximately equalized, though individual preferences will be considered as far as possible.
 - 2. Philosophy 1 and 2 are presupposed by the other courses.
- 3. A Minor in Philosophy consists ordinarily of courses 1, 2, 27, or 44, and one other.
- 4. A Major consists of the work required for a Minor together with one additional course.
- 5. Honour students must take courses 1, 2, and from three to five others. They must include 99 if their work is mainly done in this Department. The advanced work is offered in a cycle in successive years.

COURSES OF INSTRUCTION

PHILOSOPHY 1. INTRODUCTION TO THE PROBLEMS OF PHILOSOPHY.

Outlines of the course may be purchased at the Technical Supplies department.

Russell, The Problems of Philosophy (Home University Library).

Descartes, Meditations (Everyman).

Spinoza, Ethics I, II—De Intellectus Emendatione (Everyman). Locke, Essay on the Human Understanding (Ed. Pringle-Pattison, Clarendon Press).

Berkeley, Principles of Human Knowledge (Everyman).

Hume, Treatise on Human Nature, Book 1 (Everyman). Extra-Mural students require also:

Broad, The Mind and its place in Nature (Harcourt, Brace and Co.).

Monday, Wednesday, and Friday at 9.

Professor Jackson.

PHILOSOPHY 2. PSYCHOLOGY.

An elementary survey of mental life.

Pillsbury, Essentials of Psychology (Macmillan).

Kimball Young, Source Book for Social Psychology (Knopf).

Allport, Social Psychology (Houghton Mifflin).

Extra-Mural students will buy also

Humphrey, Story of Man's Mind (Dodd Mead).

Tuesday, Thursday, and Saturday at 11.

PHILOSOPHY 25. PSYCHOLOGY OF THE CHILD.

This course aims to give a psychological insight into the problems of the development and education of the child and young person. The theory and application of mental testing are discussed, and arrangements will be made for practical work in testing.

Woodrow, Brightness and Dullness in Children (Lippincott).

Freeman, Mental Tests (Houghton, Mifflin).

Sandiford, Educational Psychology (Longmans).

Koffka, Growth of the Mind (Harcourt).

Tuesday, Thursday, and Saturday at 9.

PHILOSOPHY 27. KANT.

General survey of the Philosophy of Kant and detailed study of the Critique of Pure Reason.

Kant, Critique of Pure Reason (Translations by Max Müller—Macmillan— and Meiklejohn—Bohn). Candidates who do not read German require Müller's translation.

Prolegomena to any Future Metaphysic (Translation by Mahaffy and Bernard-Macmillan).

Caird, The Critical Philosophy of Kant (Jackson, Wylie & Co.), Kemp Smith, Commentary to Kant's Critique of Pure Reason (Macmillan).

Watson, Kant Explained (Maclehose).

Paulsen, Kant (Fromann's Klassiker der Philosophie).

Prichard, Kant's Theory of Knowledge (Clarendon Press).

Monday, Wednesday, and Friday at 10. Professor Jackson.

PHILOSOPHY 28. MORAL AND POLITICAL PHILOSOPHY.

Plato, Apology, Euthyphro, Protagoras, Meno, Republic.

Aristotle, Nicomachean Ethics.

Kant, Fundamental Principles of the Metaphysic of Morals. (Abbott's Translation).

Critique of Practical Reason (Abbott's Translation).

Butler, Sermons.

Hobbes, Leviathan.

Locke—Treatises of Civil Government.

Rousseau, Social Contract.

Mill, Utilitarianism.

Field, Moral Theory.

Moore, Principia Ethica.

Bradley, Ethical Studies

Green, Prolegomena to Ethics.

Principles of Political Obligation.

Not offered in session 1929-1930.

Professor Jackson.

PHILOSOPHY 29. LOGIC.

The doctrine of Formal Logic. Criticism of Formal Logic. Modern theories of Judgment and Inference.

Joseph. Introduction to Logic (Clarendon Press).

Cook Wilson, Statement and Inference (Clarendon Press).

Bradley, Principles of Logic.

Tuesday, Thursday, and Saturday at 10. Professor Jackson.

PHILOSOPHY 44. THE PRINCIPLES OF PSYCHOLOGY.

A systematic presentation of present day psychological doctrine, which is discussed in the light of the experimental evidence. The course involves practical work, the hours of which will be arranged.

Ladd and Woodworth, Physiological Psychology (Scribner) (Longmans).

Keith Lucas, The Conduction of the Nervous Impulse. Adrian, The Basis of Sensation (Christopher).

Reading is also required in the current literature.

Monday, Wednesday, and Friday at 11. Professor Humphrey.

PHILOSOPHY 45. PSYCHOLOGY OF THE INSTINCTS AND EMOTIONS. This course is arranged for extra-mural students.

Professor Humphrey.

PHILOSOPHY 48a. ABNORMAL PSYCHOLOGY.

A study of the more modern theories of abnormal mental action, with their relation to normal psychology and everyday mental hygiene.

W. MacDougall, Abnormal Psychology (Scribners).

Not offered in session 1929-1930.

Professor Humphrey.

PHILOSOPHY 49b. HISTORY OF PSYCHOLOGY.

Discusses the solutions that representative psychological thinkers from Greek times to the present day have given of certain persistent problems, such as the relation of the mind to the body and the unity of the mind.

Brett, History of Psychology.

Rand, The Classical Psychologists (Houghton Mifflin).

Not offered in session 1929-30.

Professor Humphrey.

PHILOSOPHY 99, READING AND SEMINAR COURSE.

The following subjects are suggested: The Theory of Mental Testing; Applied Psychology; Neo-Realism; The English Hegelians; Plato and Aristotle; The Philosophical Theory of the State.

MATHEMATICS

PROFESSOR-J. Matheson, M.A.

PROFESSOR-C. F. Gummer, M.A., Ph.D.

PROFESSOR-N. Miller, M.A., Ph.D.

ASSISTANT PROFESSOR-K. P. Johnston, B.A., B.Sc.

LECTURER-D. A. Cooper, B.A.

ASSISTANT-Etta A. Newlands, M.A.

REGULATIONS

- 1. Students electing Mathematics as a Minor, Major, or Honour subject will consult the Department about the courses to be taken.
- 2. Courses 10a, 11b, 12a, 13a, and 14b may be taken by either Pass or Honour students. Courses numbered 15 or over are intended for Honour students only.
- 3. Pass students selecting Mathematics as their Major will take 1 and 2, and the equivalent of three whole courses from 3a, 4b, 7b, 10a, 11b, 12a, 13a, 14b, and Astronomy 1.

Pass students selecting Mathematics as their Minor will take 1 and 2, and the equivalent of two whole courses from 3a, 4b, 7b, 10a, 11b, 12a, 13a, 14b, and Astronomy 1.

- 4. Courses numbered 10 to 18 are intended for undergraduates only, those numbered 20 to 24 for undergraduates or graduates. Courses 30 to 34 are graduate courses and are open only to students who have taken the equivalent of three full courses numbered 10 and higher.
- 5. All Honour students making Mathematics their principal subject are advised to take at least six full courses in Mathematics, numbered 10 and higher, to be selected in consultation with the Department.

COURSES OF INSTRUCTION

MATHEMATICS 1. TRIGONOMETRY, ANALYTIC GEOMETRY, AND ALGEBRA.
DeLury, Intermediate Algebra, (Copp Clark).

Cross-born and Dans Plans Thirsen western (Gira)

Crenshaw and Derr, Plane Trigonometry (Ginn).

Tanner and Allen, Brief Course in Analytic Geometry (American Book Co.).

Also for extra-mural students,

Harding and Turner, Plane Trigonometry (Putnam).

Monday, Wednesday, and Friday at 8.

Professor Gummer, Professor Miller, Mrs. Newlands and Mr. Cooper.

MATHEMATICS 1 (h).

This course is to be taken instead of course 1 by students intending to proceed to higher work in Mathematics.

Monday, Wednesday, and Friday at 8.
Professor Matheson.

MATHEMATICS 2. ELEMENTARY CALCULUS AND ANALYTIC GEOMETRY.

Granville, Differential and Integral Calculus (Ginn).

Tanner and Allen, Brief Course in Analytic Geometry (American Book Co.).

Prerequisite, Mathematics 1.

Tuesday, Thursday, and Saturday at 8
Professor Miller and Mrs. Newlands.

'MATHEMATICS 3a. A COURSE IN SYNTHETIC PLANE GEOMETRY.

This course will not be given intra-murally in the session 1929-30.

MATHEMATICS 4b. A COURSE IN SYNTHETIC SOLID GEOMETRY.

This course will not be given intra-murally in the session 1929-30.

MATHEMATICS 7b. MATHEMATICS OF INVESTMENT.

Hart, Mathematics of Investment, with tables (Heath).

This class is intended primarily for students in Commerce, but is open to other students.

Prerequisite, Mathematics 1.

Tuesday, Thursday, and Saturday at 11. Professor Matheson.

ASTRONOMY 1. A COURSE IN DESCRIPTIVE ASTRONOMY.

Duncan, Astronomy (Harpers).

Kingston, Star Guide.

Prerequisite, Mathematics 1.

Monday, Wednesday, and Friday at 9.

Professor Johnston.

MATHEMATICS 10a. ALGEBRA.

Prerequisite, Mathematics 1 (h).

Hall and Knight, Higher Algebra (Macmillan).

Monday, Wednesday, and Friday at 11.

Mrs. Newlands.

MATHEMATICS 11b. CALCULUS.

Granville, Differential and Integral Calculus (Ginn).

(Open to students who have taken the first half of Mathematics 2.)

Monday, Wednesday, and Friday at 11.

Professor Miller.

MATHEMATICS 12a. DETERMINANTS AND THEORY OF EQUATIONS.

Dickson, First Course in the Theory of Equations (Wiley).

Prerequisites, Mathematics 2, 10a.

Monday, Wednesday, and Friday at 8.
Professor Johnston.

MATHEMATICS 13a. SYNTHETIC GEOMETRY.

A course in Modern Synthetic Geometry, plane and solid.

Prerequisite, Mathematics 2.

Tuesday, Thursday, and Saturday at 9. Professor Matheson.

MATHEMATICS 14b. SPHERICAL TRIGONOMETRY AND ASTRONOMY.

Duncan, Astronomy (Harpers).

Kingston, Star Guide.

Reference:

Dupuis and Matheson, Spherical Trigonometry and Astronomy. In connection with this course some work will be done in the observatory.

Prerequisite, Mathematics 2.

Monday, Wednesday, and Friday at 8. Professor Johnston.

MATHEMATICS 15a. ANALYTIC SOLID GEOMETRY.

Snyder and Sisam, Analytic Geometry of Space (Holt). Open to students who have taken, or are taking, 12a.

> Tuesday, Thursday, and Saturday at 8. Professor Gummer.

MATHEMATICS 16b. DIFFERENTIAL EQUATIONS.

Murray, Differential Equations (Longmans). Prerequisites, Mathematics 2, 10a, and 11b.

> Tuesday, Thursday, and Saturday at 8. Professor Miller.

MATHEMATICS 17b. ADVANCED ANALYTIC GEOMETRY.

Reference:

Sommerville, Analytical Conics (Bell). Salmon, Conic Sections (Longmans). Smith, Conic Sections (Macmillan). Prerequisite. Mathematics 12a.

> Monday, Wednesday, and Friday at 9. Professor Gummer.

MATHEMATICS 18a. ADVANCED CALCULUS.

Woods, Advanced Calculus (Ginn).

Prerequisites, Mathematics 11b, 12a, and three of 13b, 14b, 15a, 16b, and 17b.

> Monday, Wednesday, and Friday at 9. Professor Miller.

MATHEMATICS 20b. FINITE DIFFERENCES AND PROBABILITY.

Reference:

Whittaker and Robinson, Calculus of Observations (Blackie). Coolidge, Introduction to Mathematical Probability (Oxford University Press).

Prerequisites, Mathematics 12a and three of 13a, 14b, 15a, 16b, and 17b.

Monday, Wednesday, and Friday at 8.
Professor Gummer.

MATHEMATICS 21 a or b. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE.

Townsend, Functions of a Complex Variable (Holt).

Prerequisite, Mathematics 18a.

Professor Matheson or Professor Miller.

MATHEMATICS 22 a or b. THEORY OF NUMBERS.

Prerequisites, Mathematics 12a and three of 13a, 14b, 15a, 16b, and 17b.

Professor Johnston.

MATHEMATICS 23 a or b. Multiple Algebra and Quaternions.

Prerequisites, Mathematics 12a and three of 13a, 14b, 15a, 16b, and 17b.

Professor Matheson.

MATHEMATICS 24 a or b. FOURIER SERIES AND SPHERICAL HARMONICS. Prerequisites, Mathematics 15a, 16b, 18a.

Professor Gummer.

MATHEMATICS 30 a or b. THEORY OF INFINITE SERIES.

Knopp, Theorie und Anwendung der unendlichen Reihen (Springer).

Prerequisite, Mathematics 18a.

Professor Miller.

MATHEMATICS 31 a or b. THEORY OF FUNCTIONS OF A REAL VARIABLE. Reference:

Goursat-Hedrick, Mathematical Analysis, Vol. I. Pierpont, Theory of Functions of Real Variables.

Prerequisite. Mathematics 18a.

Professor Miller.

MATHEMATICS 32 a or b. MODERN HIGHER ALGEBRA.

Bôcher, Introduction to Higher Algebra (Macmillan). Dickson, Modern Algebraic Theories (Sanborn).

Professor Gummer.

MATHEMATICS 33 a or b. DIFFERENTIAL GEOMETRY.

Eisenhart, Differential Geometry. Prerequisite, Mathematics 18a.

Professor Gummer.

MATHEMATICS 34 a or b. PROJECTIVE GEOMETRY.

Veblen and Young, Projective Geometry, Vol. I.

PHYSICS

PROFESSOR—A. L. Clark, B.Sc., Ph.D., F.R.S.C.
RESEARCH PROFESSOR—J. A. Gray, B.Sc., D.Sc., O.B.E., F.R.S.C.
PROFESSOR—W. C. Baker, M.A.
PROFESSOR—J. K. Robertson, M.A., F.R.S.C.
ASSOCIATE PROFESSOR—E. Flammer, B.Sc., Ph.D.
LECTURERS—W. V. Ball, B.A.Sc., M.A.
K. Thomson, M.A.
DEMONSTRATOR—A. Mulligan, B.A.

REGULATIONS

1. Students selecting Physics as a Minor subject on a Pass course usually take Physics 1, 2, 11a, 13b, 14a and 15a.

Students selecting Physics as a Major subject on a Pass course usually take 1, 2, 11a, 13b, 14a, 15a, and one ohter course.

Courses 10b, 12a, 13b and 14a are open to Pass students with adequate mathematical preparation.

- 2. Students making Physics one of their two Honour subjects take in addition to Physics 1 and 2, from three to five courses, or the equivalent in half-courses.
- 3. When Mathematics is the related subject, the courses will be chosen, after consultation with the Head of the Physics Department, from 10b, 12a, 13b, 14a, 16a, 17b, 20b, 21a, and 99. Courses 10b, 12a, 13b, and 14a, however, are prerequisite to any of the others.
- 4. When Chemistry (or any other approved subject) is the related subject, the Honour courses may be chosen, after consultation with the Head of the Department, from 10b, 11a, 12a, 13b, 14a, 15 (a or b), 16a, 17b, 20b, 21a and 99.
- 5. When Chemistry is the subject chiefly emphasized Mathematics 16b may be substituted for one of the half-courses in Physics.
- 6. Students taking the special course in Science for Teachers will choose advanced courses from 10b, 11a, 12a, 13b, 14a, and 15a, the courses chosen to be decided after consultation with the Head of the Department. As a rule, courses 11a and 15a are recommended.
- 7. The principal Physical Journals and books relating to the lectures and the laboratory work are kept in the Library of the Physics Department and in the University Library, where they may be freely consulted by the students. Certain of these may be borrowed for limited periods by making application to the librarians in charge.

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Courses of Instruction

PHYSICS 1. MECHANICS, PROPERTIES OF MATTER, HEAT, WAVE-MOTION, SOUND, LIGHT, ELECTRICITY, AND MAGNETISM.

The work of this course is elementary, forming an introduction to the subject. Its purpose is to lay a thorough foundation for subsequent work in theoretical, experimental, and technical Physics, as well as to give a fairly complete elementary knowledge of the subject to those who do not intend to pursue it further. Only an elementary knowledge of Mathematics is required.

Kimball, College Physics (1926-27) (Henry Holt).

Lectures: Three hours, Tuesday, Thursday, and Saturday at 11.

Laboratory: Two hours, Tuesday 1-3 or Tuesday 3-5 or Wednesday

3-5.

Mr. Ball and Mr. Thomson.

PHYSICS 2. MECHANICS AND LIGHT.

Students who enter this class with Honour Matriculation standing, and who have not taken Physics 1 may be required to do the laboratory work and to pass the examination of Physics 1. (See section 8 under ADMISSION.)

MECHANICS. The work in this section is an extension of that done in Physics 1, treating the less simple parts of the subject and dealing with Dynamics of Rotation and Simple Harmonic Motion.

LIGHT. The work in this section consists of a detailed discussion of vibratory and wave motion; a treatment of Reflection and Refraction from the standpoint of wave theory; and a study of Dispersion, Interference, Diffraction, Spectroscopy, Polarization, and Double Refraction.

Prerequisite: Physics 1 or Honour Matriculation.

Texts:

Edser, Light (Macmillan) or, Reese Light (Missouri Book Co.). Additional texts for Extra-mural course:

Briggs and Bryan, A Tutorial Dynamics (W. B. Clive, London). A. W. Porter, Intermediate Mechanics (John Murray, London).

Lectures: Three hours—Tuesday, Thursday and Saturday at 9. Laboratory: Two hours—Wednesday, 2-4, or Thursday 3-5.

Professors W. C. Baker and Robertson.

Physics 10b. Mechanics.

A series of lectures in which the elements of statics and dynamics of a particle are discussed.

Prerequisite: Mathematics 2 and a minimum of 62 per cent. on Physics 2.

Lectures: Two hours—Tuesday and Thursday at 10. Laboratory: Two hours—Thursday, 3-5.

Professors W. C Baker and Flammer.

PHYSICS 11a. MECHANICS AND PROPERTIES OF MATTER.

In this course the fundamental concepts of Physics are emphasized by the detailed discussion of such topics as Elasticity, Damped Harmonic Motion, Gyroscopic Phenomena, Surface Tension, Flow of Fluids, etc.

Prerequisite: Mathematics 2 and 62 per cent. standing on Physics 2.

Lectures: Two hours-Monday and Wednesday at 8.

Laboratory: Two hours-Tuesday, 3-5. Professor W. C. Baker.

PHYSICS 12a. INTRODUCTION TO THE MATHEMATICAL THEORY OF ELECTRICITY AND MAGNETISM.

Prerequisite: Mathematics 2 and 62 per cent. standing on Physics 2.

Lectures: Two hours—Wednesday and Friday at 10. Laboratory: Two hours—Tuesday, 3-5.

Professor W. C. Baker.

PHYSICS 13b. ELECTRICITY AND MAGNETISM.

In this course an attempt is made to acquaint the student with some of the modern developments in Physics. Lectures are given on such topics as, The Structure of the Atom, Conduction of Electricity through Gases, Radioactivity and X-rays.

Prerequisite: Mathematics 2 and 62 per cent. standing on Physics 2.

Text-book:

. J. A. Crowther, Ions, Electrons and Ionizing Radiations.

Lectures: Two hours—Wednesday and Friday at 10. Laboratory: Two hours—Tuesday, 3-5.

Professor Gray.

PHYSICS 14a. HEAT.

A course on the fundamental laws of Thermodynamics and their application to the Thermodynamical Scale of Temperature, to the treatment of Saturated Vapours and to Reversible Processes.

Prerequisite: Mathematics 2 and 62 per cent. standing on Physics 2.

Lectures: Two hours—Tuesday and Thursday at 10. Laboratory: Two hours—Thursday, 3-5.

Professor Clark.

PHYSICS 15a or b. LABORATORY.

A laboratory course designed for students on a Pass course taking Physics as a Major or Minor. In certain cases a student is allowed to spread his work over both terms and to write the examination in April.

Laboratory: Six hours. Professor W. C. Baker. Students desiring to attend lectures in courses beyond 15a are advised to acquire a reading knowledge of French and German.

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PHYSICS 16a. DYNAMICS OF RIGID AND ELASTIC BODIES.

A discussion of Motions of a Rigid Body, Ellipsoids of Inertia, Motion with Fixed Axis and Fixed Point, Euler's Equations, and applications to Motion of the Symmetrical Top. Stress and Strain Relations in Elastic Bodies, Elastic Constants.

Prerequisite: Physics 10b, 12a, 13b and 14a.

Lectures: Three hours—Monday, Wednesday, and Friday at 11.
Professor Flammer.

PHYSICS 17b. PHYSICAL OPTICS.

A course of lectures on the theory and phenomena of Physical Optics, including a discussion of Wave Motion, Diffraction, Interference Spectroscopes, Spectroscopy, Polarization and Double Refraction.

Prerequisite: Physics 10b, 12a, 13b and 14a,

Lectures: Two hours—Tuesday and Thursday at 11.

Laboratory: Two hours—Monday 2-4, or Wednesday 2-4.

Professor Robertson.

PHYSICS 20b. ELECTRICITY AND MAGNETISM.

Electrodynamics, Conduction through Gases.

Prerequisite: Physics 10b, 12a, 13b and 14a.

Lectures: Three hours—Monday, Wednesday, and Friday at 11.

Professor Flammer.

PHYSICS 21a. KINETIC THEORY OF GASES.

Prerequisite: Physics 10b, 12a, 13b and 14a.

Text-book:

Bloch, Kinetic Theory of Gases.

Lectures: Three hours—Tuesday, Thursday, and Saturday at 11.

Professor Gray.

PHYSICS 22 a or b. LABORATORY. Six hours.

PHYSICS 27 a or b. MECHANICS.

The development and application of such important principles as the Principle of Virtual Work, Principle of d'Alembert, Hamilton's Principle of the Least Action, Lagrange's Equations, and a brief treatment of Non-Newtonian Mechanics. Three hours.

Professor Flammer.

PHYSICS 28 a or b. THERMODYNAMICS. ADVANCED COURSE.

PHYSICS 29 a or b. OPTICS.

PHYSICS 30 a or b. ELECTRICITY AND MAGNETISM.

PHYSICS 31 a or b. RADIATION AND QUANTUM HYPOTHESIS.

PHYSICS 32 a or b. PARTIAL DIFFERENTIAL EQUATIONS OF PHYSICS.

PHYSICS 33 a or b. ELECTRICAL OSCILLATIONS.

PHYSICS 34 a or b. HYDRODYNAMICS AND AERODYNAMICS.

PHYSICS 35. LABORATORY.

Usually a small piece of directed research under the immediate supervision of a member of the staff. The aim is to familiarize the student with the conditions, methods, and spirit of physical research. If the student proves himself capable, he may be given a problem for independent investigation.

PHYSICS 36b. QUANTUM MECHANICS.

Lectures-Three hours.

Professor Flammer.

PHYSICS 99. HONOUR SEMINAR AND READING COURSE.

Each student will be assigned work after consultation with the Head of the Physics Department.

The work in connection with this course will consist not only of independent reading but also of experimental work relating to the special field in which the student is reading.

CHEMISTRY

PROFESSOR OF CHEMISTRY—Arthur C. Neish, B.A., A.M., Ph.D., F.C.I.C.

PROFESSOR-L. F. Goodwin, A.C.G.I., Ph.D., F.I.C.

Professor-J. A. McRae, M.A., Ph.D., F.I.C.

ASSISTANT PROFESSOR-J. F. Logan, B.A., A.M., Ph.D.

ASSISTANT PROFESSOR-Grenville B. Frost, B.A., Ph.D.

LECTURERS-A. F. G. Cadenhead, B.A., F.C.I.C.

Roy L. Dorrance, M.A.

MILTON HERSEY FELLOW-J. S. Maclennan, B.Sc.

DEMONSTRATOR--E. M. Boyd, B.A.

REGULATIONS

Sequence: Chemistry 1 and 2 are prerequisite to all other courses in Chemistry.

Pass Minor: Chemistry 1, 2, 21, 3 or 71.

Pass Major: Chemistry 1, 2, 21, 3, 41 or 71.

Honours, Five courses: Chemistry 1, 2, 21, 35, 41 or 61.

Honours, Six courses: Chemistry 1, 2, 21, 35, 41, 61 or 71.

Honours, Seven courses, with Physics Minor: Chemistry 1, 2, 21, 35, 41, and two other full courses from Chemistry 61, 71, 101b, 106b, 121, 145, 141, 171a.

Honours, Seven courses, with Biology Minor: Chemistry 1, 2, 21, 35, 41, and two other full courses from Chemistry 61, 71, 101b, 106b, 121, 145, 141, 171a.

Honours, Seven courses, with Minor consisting of Geology 1 (62%), Mineralogy 1 (62%), Geology 10, and any other two courses numbered 10 or over in Geology or Mineralogy; Chemistry 1, 2, 21, 35, 41, and two other full courses from Chemistry 61, 71, 101b, 106b, 121, 145, 141, 171a.

Note.—In the above Honours, Seven Courses, either 61 or 71 but not both may be counted towards Honours. Students taking Honours in Chemistry must consult the Head of the Department after they have passed Chemistry 2.

Candidates for the degree of M.A. who include Chemistry as one of their two special subjects must have their choice of courses approved by the Department.

	Courses	Second and Advanced Courses	Research Training Courses
General and Inorganic Chemistry	1	101b, 106b	2 01
Qualitative Analysis	2		
Organic Chemistry	21	121,	221
Quantitative Analysis			231
Physical Chemistry	41	145, 141	241
Physiological Chemistry	61		261
Industrial Chemistry	71,	171a	271

Courses of Instruction

General and Inorganic Chemistry

CHEMISTRY 1. GENERAL CHEMISTRY.

This course besides dealing with the history, methods of preparation, properties and industrial application of the most important non-metals and metals and their compounds, emphasizes the fundamental theories, laws and principles of Chemistry. Elementary analytical chemistry is introduced and a few simple unknowns are given. This course is open to beginners in Chemistry.

Texts-Kendall, Smith's College Chemistry (Century Co.)

Laboratory Outline for College Chemistry.

Lectures—Monday, Wednesday, and Friday at 9 in room 310.

Laboratory—Thursday, 1-3, in rooms 305-308.

Professor Neish and Assistants.

CHEMISTRY 101b. ADVANCED GENERAL CHEMISTRY.

The work of this course is mainly devoted to the study of the atomic theory and its application to the structure of inorganic compounds.

Prerequisite—Chemistry 1, 2, 21, 35, 41.

Lectures—Monday and Friday at 11 in room 105. Laboratory—Wednesday, 1-4, room 209.

Professor Frost.

CHEMISTRY 106b. COLLOID CHEMISTRY.

An introductory course of three hours per week for the second term. The lectures will deal with the general properties of colloids, surface phenomena, adsorption, and special stress will be laid upon the practical applications of Colloid Chemistry. The importance of the subject in the fields of both inorganic and organic chemistry will be demonstrated by laboratory experiments, consisting of the preparation of typical colloids, the various methods of identification, electrical properties, "gold number", swelling and hydration of gelatins, etc.

Prerequisite—Physics 1 and Chemistry 1, 2, 21, 3 or 35 and 41; or Chemistry 106b and 21, 3 or 35, and 41 may be taken in the same year.

Texts-Hatschek, Introduction to Physics and Chemistry of Colloids, fifth edition 1925 (Blakistons Sons & Co., (Churchill).

Holmes, Laboratory Manual of Colloid Chemistry (John Wiley & Sons).

> Lecture and Laboratory-rooms 105-201, Monday, 1-4. Mr. Cadenhead.

CHEMISTRY 201. GENERAL AND INORGANIC CHEMISTRY—Research Train-

For graduate students electing thesis work in Inorganic Chemistry.

Professor Neish, Professor Frost, and Mr. Cadenhead.

Qualitative Analysis

CHEMISTRY 2. QUALITATIVE ANALYSIS.

The lectures deal with the theory of analytical chemistry, and the chemistry of the analytical reactions. The development and application of the laws of equilibrium and solutions are emphasized, and special attention is given to the application of these laws in laboratory practice. The laboratory work includes the systematic analysis of the usual basic and acid ions and unknowns.

Prerequisite—Chemistry 1.

Texts-Stieglitz, Qualitative Chemical Analysis, Vol. I (Century Co.). A. A. Noyes, Qualitative Chemical Analysis, 1922 edition, (Macmillan Co.).

Reference Text-Treadwell (Hall), Vol. I (John Wiley).

Lectures—Tuesday and Thursday at 11 in room 310, Laboratory-Wednesday, 1-4, in rooms 107, 109.

Mr. Cadenhead.

Organic Chemistry

CHEMISTRY 21. ORGANIC CHEMISTRY.

An elementary course in general organic chemistry. The properties of some of the more important compounds are studied in the laboratory and a number of them prepared.

Prerequisite—Chemistry 1. 2.

Texts-Perkin and Kipping, Organic Chemistry (W. R. Chambers). Fisher, Laboratory Manual of Organic Chemistry (Wiley & Sons).

> Lectures-Wednesday and Friday at 11 in room 105. Laboratory-Wednesday, 1-4, in room 213.

> > Professor McRae

CHEMISTRY 121. ADVANCED ORGANIC CHEMISTRY.

Advanced systematic organic chemistry, including lectures on special topics such as terpenes, alkaloids, stereoisomerism and carbohydrates. The laboratory work consists of the preparation of a number of substances to illustrate the general laboratory methods of organic chemistry, including practice in quantitative organic analysis.

Prerequisite—Chemistry 1, 2, 21, 35, 41; or Chemistry 121 and 41 may be taken in the same year.

Texts—Bernthsen-Sudborough, Organic Chemistry (Blackie & Sons): Cohen, Practical Organic Chemistry (Macmillan Co.).

Books of Reference-

Cohen, Advanced Organic Chemistry (Arnold).

Henrich-Johnson, Theories of Organic Chemistry (Wiley & Sons) Lectures—Tuesday and Thursday at 11, in room 105. Laboratory-Wednesday 1-4, or Saturday 9-12, in room 213. Professor McRae.

CHEMISTRY 221. ORGANIC CHEMISTRY—Research Training.

For graduate students electing thesis work in Organic Chemistry. Professor McRae.

Quantitative Analysis

CHEMISTRY 3. QUANTITATIVE ANALYSIS.—Pass Course.

This is an elementary course designed to illustrate the fundamental procedures of Quantitative Analysis. Gravimetric determinations are made of sulphur, chlorine, iron and phosphorous. A full treatment of volumetric analysis is given, including acidimetry and oxidation-reduction methods. The determinations include iron, chromium and manganese in simple ores, iodimetric copper, the analysis of brass, and other similar determinations. Text (for Laboratory work only):

Talbot, Quantitative Chemical Analysis (Macmillan).

For Reference: Fales, Inorganic Quantitative Analysis (Century Co.).

> Lectures—Thursday at 1 in room 310. Laboratory-Wednesday or Thursday 1-5 in room 207. Professor Frost.

CHEMISTRY 35. QUANTITATIVE ANALYSIS-Honour Course.

The class-room work is of a more advanced nature than that of Pass course 3, and the laboratory determinations cover a wider range of practice and technique.

Text-book: Fales, Inorganic Quantitative Analysis (Century Co.). Note.—For intra-mural honour students this is a whole course. For extra-mural students at Summer School it is divided into half courses, offered in successive years, and may be taken by either pass or honour students.

Lectures-Monday, and Wednesday at 9, room 105.

Laboratory—Wednesday, Thursday or Friday, 1-4, or by special arrangement.

Professor Frost.

CHEMISTRY 231. QUANTITATIVE ANALYSIS—Research Training.

For graduate students electing thesis work in Quantitative Analysis.

Professor Frost.

Physical Chemistry

CHEMISTRY 41. PHYSICAL CHEMISTRY.

The principles of Physical Chemistry, and their application to the study of chemical reactions and equilibria. Special attention is given to problems of industrial importance. The laboratory work is designed to acquaint the student with the most important physical chemical measurements and to train him in habits of accuracy, despatch, and in the planning of methods for research.

Prerequisite—Chemistry 1, 2, 21, 3 or 35, or 3 or 35 and 41 in the same year.

Texts-Walker Elements of Physical Chemistry (Macmillan).

Findlay, Practical Physical Chemistry (Longmans, Green & Co.)
Lectures—Tuesday and Thursday at 9, in room 201.

Laboratory—Tuesday, 1-4, or Wednesday, 1-4, in rooms 115, 116.

Professor Goodwin.

CHEMISTRY 141. ADVANCED PHYSICAL CHEMISTRY.

This course is designed to give the student an intimate working knowldege of the fundamental principles of Physical Chemistry, and a measure of command in the use of these principles in the solution of chemical problems. A full discussion of thermodynamics is given, including the numerical calculation of free energy and entropy, and a brief treatment of the Nernst Heat Theorem.

NOTE: For those students who may desire it, a short tutorial course in mathematical preparation for physical chemistry may be given by Dr. Frost at hours to be arranged.

Prerequisite—Chemistry 1, 2, 21, 35, 41.

Text-books:

Noyes and Sherrill, Chemical Principles (Macmillan).

Sherrill, Laboratory Experiments on Physico-Chemical Principles (Macmillan).

Taylor, Elementary Physical Chemistry (Van Nostrand).

Lectures—Tuesday and Thursday at 10 in room 105. Laboratory—Friday 1-4, in room 209.

Professor Frost.

CHEMISTRY 145. PHYSICAL CHEMISTRY, ELECTRO-CHEMISTRY.

The work of this course deals with the conduction of the electric current through solutions, considering such quantities as transport numbers, mobility of ions, specific and equivalent conductivity; the electromotive force of concentration cells, with and without diffusion, developed according to the Nernst Theory; dry cells and storage batteries; some industrial applications. The laboratory work consists in determination of the quantities discussed in the lectures and the production of some compounds such as ammonium persulphate and white lead, electrolytically.

Prerequisite—Chemistry 1, 2, 21, 35, 41.

Texts:

Thomson, Theoretical and Applied Electrochemistry (Macmillan Company).

Findlay, Practical Physical Chemistry (Longmans Green & Company).

Reference:

Blum and Hogaboom, Principles of Electroplating and Electroforming (McGraw-Hill).

Kolthoff and Furman, Potentiometric Titrations (John Wiley). Allmand—Applied Electrochemistry (Arnold).

Lectures—Monday at 10, in room 105, and Saturday at 8, in room 310. Laboratory—Thursday 1-4, in room 201.

Mr. Dorrance.

CHEMISTRY 241. PHYSICAL CHEMISTRY—Research Training.

For graduate students electing thesis work in Physical Chemistry.

Professor Goodwin, Professor Frost and Mr. Dorrance.

Physiological Chemistry

CHEMISTRY 61. PHYSIOLOGICAL CHEMISTRY.

The course includes a detailed study of the properties of the carbohydrates, lipoids and proteins and of the chemical processes involved in respiration, secretion, digestion, absorption, metabolism and excretion and the chemistry of the tissues. The composition of foods and the elements of the science of nutrition are also discussed.

Prerequisite—Chemistry 1, 2, 21 and 3 or 35 or their equivalent.

Texts—Bodansky, Introduction to Physiological Chemistry (John Wiley and Sons).

Hawk and Bergeim, Practical Physiological Chemistry (Blakiston).

Lectures—Monday and Friday at 11, in room 310.

Laboratory—Section A, Monday, 1-4, in room 301.

Section B, Thurdsay, 1-4, in room 301.

Professor Logan.

CHEMISTRY 261 PHYSIOLOGICAL CHEMISTRY—Research Training.

For graduate students electing thesis work in Physiological Chemistry.

Professor Logan.

Industrial Chemistry

CHEMISTRY 71. INDUSTRIAL CHEMISTRY—Lectures and Laboratory.

In the lectures the following topics, illustrated by specimens, lantern slides, motion pictures, and visits to plants will be discussed: Industrial applications of air and water, natural gases, petroleum products, producer gas, water gas, coal gas, by-product coke, sulphur, sulphuric acid, sulphite, pulp and paper, hydrochloric acid, nitric acid and ammonia, nitrates natural and synthetic, soda, fertilizers, mortars and cements.

In the laboratory typical industrial processes such as crystallization, precipitation, filtration, distillation and rectification, incomplete reactions, gas analysis and industrial flow sheets will be carried out and interpreted.

Prerequisite—Chemistry 1, 2, 21, 3, or 35 and Physics 1.

Texts—Rogers, Manual of Industrial Chemistry (Van Nostrand).

Atack, Chemist's Year Book (Westman Press), or Olsen,

Van Nostrand's Annual (Van Nostrand).

Lectures—Tuesday and Thursday at 10, in room 310. Laboratory—Monday 1-4, in room 210.

Professor Neish.

CHEMISTRY 171a. ADVANCED INDUSTRIAL CHEMISTRY.

This course deals with the following subjects: Distillation and dephlegmation, wood distillation, alcohol, acetic acid, acetone. Dissolution, decantation, filtration, centrifugals. Manufacture of

organic nitro compounds and explosives, cyanamide, ammonia. Equilibrium and optimum conditions for contact sulphuric acid and synthetic ammonia processes, absorption of gases by liquids and solids, absorption and reaction towers, electric furnace products and synthetic acetone, potash manufacture and recovery, recovery of waste acids, ceramics, films, sulphite, sulphate and mechanical wood pulp, paper.

Prerequisite—Chemistry 1, 2, 21, 3 or 35, 41, 71.

Texts—Partington, The Alkali Industry (Balliere, Tindall & Co.).

References to books in Library.

Lectures—Monday and Friday at 11, in room 105, Laboratory—Monday 1-4, in room 112.

Professor Goodwin

CHEMISTRY 271. INDUSTRIAL CHEMISTRY RESEARCH.

For graduate students electing thesis work in Industrial Chemistry.

Professors Neish and Goodwin.

BIOLOGY

PROFESSOR—W. T. MacClement, M.A., D.Sc. ASSOCIATE PROFESSOR—R. O. Earl, B.A., M.Sc., Ph.D. ASSISTANT PROFESSOR—A. B. Klugh, M.A., Ph.D. LECTURER—H. C. White, B.A.

REGULATIONS

- 1. Students taking only one course in this department must choose either Biology 1 or Biology 2; it is not necessary to take Biology 1 before Biology 2.
- 2. All students electing Biology as a Major or Honours subject must consult the department about the courses to be taken.
- 3. A Minor in a Pass Course will consist of Biology 1 and 2, and ordinarily 10a, 10b, 22a, 23b.
- 4. A Major consists of the work required for a Minor together with one additional course, which may be in Bacteriology.
- 5. Honour students must take courses 1 and 2, and from three to five others, among which may be selected courses in Bacteriology.

COURSES OF INSTRUCTION

BIOLOGY 1. GENERAL BOTANY.

The fundamental facts and principles of plant life. A careful study of form, structure and reproduction of representatives of the principal groups. Attention is given to life processes, particularly in the higher plants.

Textbook: Holman and Robbins, Textbook of General Botany (Wiley). Laboratory Manual.

Lectures, Tuesday and Thursday at 9. Laboratory, Monday or Wednesday 1-4.

Professor Earl.

BIOLOGY 2. GENERAL ZOOLOGY.

Lectures on the classification, morphology, physiology, development, evolution, distribution, and economic importance of animals.

Microscopic study of the protozoa and hydra, and dissection of the clam, earthworm, locust, crayfish, fish, frog, bird and mammal.

Textbooks:

Newman, Outlines of General Zoology (Macmillan). Colton, Practical Zoology (D. C. Heath).

Lectures, Tuesday and Thursday at 10.

Laboratory, Monday, 1-4.

Professor Klugh.

BIOLOGY 3. MEDICAL BIOLOGY.

See Medical Calendar.

Professor Earl.

BIOLOGY 10a and 10b. PLANT MORPHOLOGY.

A study of the structure, development, and reproduction of plants.

Textbook: Coulter Barnes and Cowles, Textbook of Botany, Vol. I, Pt. I (American Book Co.).

Prerequisite—Biology 1. Biology 10a is prerequisite to 10b.

Lectures, Monday and Friday at 10.

Laboratory, Friday 1-4.

Professor Earl.

BIOLOGY 11. PLANT PHYSIOLOGY.

A series of experimental studies of the chemical and physical activities of plants, with class discussions.

Prerequisites—Biology 1, Chemistry 1. Lecture, Tuesday at 10. Laboratory, Monday and Friday 2-4.

BIOLOGY 12a and 12b. PLANT ANATOMY.

The study of the anatomical structure of plants.

Textbook: Eames & McDaniel, Plant Anatomy (McGraw, Hill Co.).

Prerequisite—Biology 1.

Lectures, Monday and Wednesday at 9.

Laboratory, Wednesday 1-4.

Professor MacClement.

BIOLOGY 13a and 13b. PLANT ECOLOGY, GEOGRAPHICAL.

The relations of plants to latitude, altitude, climate, and other distributive factors, and the structural modifications due to special environment. Offered in 1929-30 but not in 1930-31.

Textbook:

Coulter, Barnes and Cowes, Vol. II (Am. Bk. Co.).

Lectures, Tuesday and Thursday at 9.

Laboratory, Thursday 2-5.

Professor MacClement.

BIOLOGY 14hf. MICROTECHNIQUE.

Principles and methods of killing, fixing, embedding, sectioning, staining, and mounting microscopic preparations. The preparation of permanent mounts of plant and animal structures.

Prerequisites—Biology 1 and 2, Chemistry 1.

Laboratory, Thursday, 2-4.

Professor Klugh.

BIOLOGY 151

BIOLOGY 15a. EVOLUTION AND GENETICS.

A consideration of data and concepts of organic evolution; the principles of genetics; experimental work on variation and heredity in plants and animals.

Textbook: Babcock and Clausen, Genetics in Relation to Agriculture (McGraw-Hill Book Co.)

Prerequisites-Biology 1 and 2.

This course is conducted in alternate years. It will be given in 1929-30.

Lectures, Monday and Wednesday at 9; Laboratory, hours to be arranged.

Professor Earl.

BIOLOGY 18. ECONOMIC FUNGI.

Class and laboratory studies of the fungi producing the more important plant diseases.

This course is offered in alternate years. It will not be offered in 1929-30.

Prerequisites—Biology 1, 10, 12.

Lecture, Tuesday and Thursday at 8. Laboratory, Monday 1-4.

Professor MacClement.

BIOLOGY 20. TAXONOMY OF PLANTS.

The principles of classification applied to Algae, Fungi, Mosses, Ferns, Fern Allies, and Flowering Plants.

Prerequisites—Biology 1, 10 and a collection of at least 100 Canadian plants preserved by the student.

Lectures, Monday and Wednesday at 8. Laboratory, Tuesday 2-5.

Professor MacClement.

BIOLOGY 21. CANADIAN ZOOLOGY.

The classification, distribution, life histories, habits and economic importance of the commoner and more important Canadian animals. Field study of animals and their environment and the study of museum specimens representative of each group.

Prerequisite-Biology 2.

Lectures, Tuesday and Thursday at 11. Laboratory, Friday 2-4.

Professor Klugh.

BIOLOGY 22a. HISTOLOGY AND INVERTEBRATE ANATOMY.

The microscopic study of animal tissues. Study of slides of typical invertebrates.

Prerequisites—Biology 1 and 2.

Textbook: Hegner, College Zoölogy.

Lecture, Wednesday at 11. Laboratory, Tuesday and Thursday, 2-4.

Professor Klugh.

BIOLOGY 23b. VERTEBRATE ANATOMY AND PHYSIOLOGY.

Dissection of the frog. Lectures and practical work in animal physiology.

Prerequisites-Biology 1, 2, and 22a.

Textbooks:

Marshall, The Frog.

Mitchell, General Physiology (McGraw-Hill).

Lecture, Wednesday at 11.

Laboratory, Tuesday and Thursday, 2-4.

Professor Klugh

FIOLOGY 24. ANIMAL ECOLOGY.

The physical and biological factors of the environment, succession, convergence, and associations. Practical applications of ecology.

Texts: Needham & Lloyd, Life of Inland Waters (Comstocks).

Chapman, Animal Ecology (Burgess-Brooke).

Lectures, Monday, Wednesday, and Friday at 10. Professor Klugh.

BIOLOGY 26. ANIMAL PHYSIOLOGY.

Study of the general principles of Physiology, and the physiological investigation of blood, circulation, respiration, muscle, and nervous system. The physiology of digestion, metabolism, excretions, and internal secretions.

Prerequisite—Biology 1 and 2 (or 3), 22a, 23b.

Hours to be arranged. Dr. G. S. Melvin.

BIOLOGY 27. EMBRYOLOGY.

The Embryology of the pig and chick.

Prerequisites—Biology 1 and 2 (or 3), 22a, 23b, 26.

Hours to be arranged. Dr. H. G. Ettinger.

BIOLOGY 30. ECONOMIC ZOOLOGY.

Marine and fresh water biology with special reference to the fisheries.

Prerequisites—Biology 1, 2, 21, 24.

One lecture and four laboratory hours per week to be arranged.

Professor Klugh.

BIOLOGY 153

BIOLOGY 31. ADVANCED ECONOMIC ZOOLOGY.

The application of Biology to the fisheries, game, fur-bearing animals, national parks, etc.

Prerequisites—Biology 1, 2, 21, 24, 30.

Hours to be arranged.

This course is given in alternate years. Not offered in 1929-30.

Professor Klugh.

BIOLOGY 32b. CYTOLOGY.

The structure and life-history of the cell. Laboratory work, reading and conferences.

Textbook: Sharp, Introduction to Cytology (McGraw-Hill Book Co.).

Prerequisites—Biology 10a, 10b,22a.

This course is conducted in alternate years.

Not offered in 1930-31.

Professor Earl.

BIOLOGY 33. DENDROLOGY.

A study of tree growth, structure and reproduction. The factors affecting the distribution of hardwood and soft wood trees. Methods of harvesting and reproducing the timber crop. Identification of Canadian timber trees. The qualities of the various economic woods of Canada. The chief insect and fungal forest pests.

This course is offered in 1929-30 but not in 1930-31.

Prerequisites-1, 2, 10a, 12a, 21.

Lectures, Monday and Wednesday at 11, Laboratory, Friday, 1-4.

Professor MacClement.

BIOLOGY 34. ECONOMIC ENTOMOLOGY. A study of the principal insect pests of the farm and forest and methods of control.

Prerequisites—Biology 1, 2, 21, 24.

One lecture and four hours laboratory work per week. Hours to be arranged.

This course is offered in alternate years. Offered in 1929-30.

Professor Klugh.

BACTERIOLOGY

PROFESSOR-Guilford B. Reed, M.A., B.Sc., Ph.D.

REGULATIONS

- 1. Students in a Pass course taking Biology as a Major may take as a part of the Biology prescription Bacteriology 10a and 12b.
- 2. Students taking Biology as an Honour subject may elect as a part of the Biology prescription Bacteriology 10a, 12b, 13a, and 20.

Courses of Instruction

BACTERIOLOGY 10a.

An introductory course in general Bacteriology, including the structure and physiology of bacteria; fermentation and decomposition, especially in foods; disease and immunity.

Prerequisites: Biology 1, 2, 11, and Chemistry 1.

Lectures, Wednesday and Friday at 9.
Laboratory, Tuesday and Thursday, 1-3

BACTERIOLOGY 12b. THE PATHOGENIC BACTERIA, a systematic study of the disease producing organisms; infection and immunity.

Lectures, Wednesday and Friday at 9. Laboratory, Tuesday and Thursday 1-3.

BACTERIOLOGY 13a. THE MICROBIOLOGY OF FOODS AND WATER SUPPLIES.

Hours to be arranged.

BACTERIOLOGY 20. RESEARCH IN GENERAL PHYSIOLOGY AND BACTERIOLOGY.

GEOLOGY

PROFESSOR—M. B. Baker, B.A., B.Sc., F.G.S.A.
MILLER MEMORIAL RESEARCH PROFESSOR—
ASSOCIATE PROFESSOR—B. Rose, B.Sc., Ph.D., F.G.S.A.

REGULATIONS

- 1. Mineralogy 1 is prerequisite to Geology 2 and 10. Mineralogy 2(i) is part of Geology 10. Geology 1 and 2 are prerequisite to Geology courses numbered 13, 17, 18, 19.
- 2. For a Minor in Geology students will take Mineralogy 1 and Geology 1, 2, and 13.
- 3. For a Major in Geology students will take either the inorganic and economic side, or the organic paleontological side. In the first case they will select Mineralogy 1 and Geology 1, 2, 10, 17; in the second case Mineralogy 1 and Geology 1, 2, 13, and 17.
- 4. For Honours in Geology, students will again select either the inorganic or the organic side, and take five or six courses from either of the following groups. Candidates making Geology their main Honour subject must include course 99.
 - A. Mineralogy 1 and Geology 1, 2, 10, 14, and 15.
 - B. Mineralogy 1 and Geology 1, 2, 13, 18, and 19.

Courses of Instruction

GEOLOGY 1. INTRODUCTORY COURSE IN PHYSIOGRAPHY AND GENERAL GEO-LOGY.

The following topics indicate roughly the scope of the course: Forces operating on the earth's surface,—the atmospheric forces, streams, glaciers, waves, etc.; the land forms produced by these forces; volcanism; earth movements; structure of the earth's crust; mountain formation; kinds of rocks and their formation; fossils; outline of the history of the earth, including the evolution of its plant and animal life. In addition to those topics which are more particularly the province of Geology, consideration is given to the various types of topography and their method of formation, the atmosphere, its temperature, moisture and circulation, storms, climate, ocean currents, tides, etc., and, as far as time will permit, their influence on the human race will be indicated. This course will prove valuable to students who contemplate teaching Physical Geography in our schools.

The lectures are illustrated by maps, models, lantern slides, and specimens.

LABORATORY WORK will consist of the examination of typical specimens of fossil plants and animals, and of hand specimens of the more common rocks, together with the field excursions, the expenses of which are covered by the laboratory deposit.

Text-book: Norton, Elements of Geology (Ginn & Co.).

Sec. A—Monday, Wednesday, and Friday at 11. Sec. B—Tuesday, Thursday, and Saturday at 11.

Professor Rose.

GEOLOGY 2. STRUCTURAL AND PHYSIOLOGICAL GEOLOGY, AND THE GEOLOGY OF CANADA.

- (i) The principles of earth movements, deformation, faulting, mountain formation and volcanism are covered in a more general and more advanced way than in Geology 1.
- (ii) Advanced consideration of surface processes, action of winds, streams, waves, glaciers, etc., various types of marine and continental sedimentation, and the development of land forms, map reading and interpretation.
- (iii) In this course special attention will be given to stratigraphical Geology, and the distribution of the various rock formations in Canada. The topography as well as the structural make-up of the Dominion is studied. The climatic and economic differences of the various portions of Canada are explained.

Monday, Wednesday, and Friday at 9. Professor Rose.

GEOLOGY 10. ELEMENTARY PETROGRAPHY.

This course is essentially on igneous Geology and Petrography, and will consist of lectures and discussion on the geological occurrences of igneous rocks, the processes of crystallization from magmas, the forms assumed, the textures, and the metamorphic changes that are produced in the intrusive mass itself, and on its surroundings. The lectures will be illustrated by projections of thin sections of rocks, and will be supplemented by laboratory work on hand specimens. Students taking this course will include Mineralogy 2 (i) as part of the work.

Text-books:

Luquer, Minerals in Rock Sections.
Pirsson, Rocks and Rock Minerals.

Lectures, Tuesday at 10, Wednesday at 1. Laboratory Wednesday 2 to 4.

Professor Baker.

Geology 157

GEOLOGY 13. HISTORICAL GEOLOGY.

Continental evolution and geologic life development with special reference to North America.

Text-book: Pirsson and Schuchert, Textbook of Geology, Part II (Historical), (John Wiley & Sons).

• Tuesday and Thursday at 9. Professor Rose.

GEOLOGY 14. ADVANCED PETROGRAPHY.

A course of lectures will be given on the microscopic characters and classification of igneous rocks, and on their origin, geological form, and general field characters. The lecture work will be supplemented by assigned special reading and by laboratory work with both hand specimens and microscopic slides. Special attention will also be paid to the metamorphic rocks.

Monday at 2 and 3. Professor Baker.

GEOLOGY 15. ECONOMIC GEOLOGY.

The work in this class is an illustration of the principles of ore deposition. For this purpose type deposits in the largest producing districts throughout the world are studied in some detail. It is of course impossible to treat of all products, but the basis of classification and the fundamental principles underlying economic deposits are studied with particular reference to iron, copper, nickel, zinc, lead, silver, gold, aluminum, peat, coal, gas, oil, salt, abrasive and refractory materials. A few lectures on building stone, and on clays and the manufacture of clay products will be given.

Within one hundred miles of Kingston a greater variety of economic minerals and ores is mined than in any similar area in Canada, and possibly in the world. Through the kindness of the managers, advanced students may visit the various mines and thus gain valuable information regarding economic Geology.

Monday and Thursday at 10, Tuesday at 11. Professor Baker.

GEOLOGY 17. FIELD AND LABORATORY GEOLOGY.

The laboratory exercises in this course are designed to illustrate by means of specimens, models, photographs, maps, and sections, the principal original and secondary structures of rocks; the origin and mode of occurrence of rocks in the earth's crust, their cycles of alteration and change, their interpretation and representation in geological surveys and maps.

The field work comprises observations upon the weathering of rocks, shore phenomena, glacial phenomena, igneous and sedimentary rocks, faulting, folds, joints, cleavage, schistosity. It gives practice in methods of surveying; in geological mapping, and construction of sections; in measuring the thickness of strata; and in determining the relative ages of geological structures. The preparation of a map to scale from actual field work done by the student is required.

Five working hours a week will be arranged to suit the class at the beginning of the fall term.

Professor Rose.

GEOLOGY 18. SYSTEMATIC PALEONTOLOGY.

A study of invertebrate and vertebrate fossils, their classification, identification, and distribution, both geologic and geographic.

Text-book: Shimer, Introduction to the Study of Fossils (Macmillan).

Lectures, Tuesday and Thursday at 11.

Two laboratory hours per week to be arranged to suit students' time-table. Professor Rose.

GEOLOGY 19. STRATIGRAPHY.

The problems of sedimentation and the sedimentary rocks.

Reference Book: Grabau, The Principles of Stratigraphy.

Lecture, Wednesday at 10.

Four laboratory hours to be arranged. Professor Rose.

GEOLOGY 99. READING AND SEMINAR COURSE IN GEOLOGY FOR HONOUR STUDENTS.

The reading prescribed under this course will be adapted to the particular field of study in which the student is specializing. A departmental library is maintained for this purpose.

GRADUATE COURSES

GEOLOGY 113. PRINCIPLES OF PRE-CAMBRIAN GEOLOGY.

The origin, history and distribution of the rocks older than the Cambrian. Special attention will be given to the Canadian Pre-Cambrian areas. The course will be given in alternate years. It will not be offered in 1929-30.

Open only to graduate students.

Prerequisites—Geology 1, Mineralogy 1, Geology 10.

Lectures—Two hours, to be arranged.

Reading and Laboratory work—Three hours, to be arranged.

The Miller Memorial Research Professor.

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GEOLOGY 115. PRE-CAMBRIAN ORE DEPOSITS.

Discussion of ore deposits in Pre-Cambrian rocks with especially reference to those in Canada. The genesis and character of the deposits will be studied in detail.

Open only to graduate students.

Prerequisites—Geology 1 and 10, Mineralogy 1 and 11. It is advisable that Geology 15 shall also have been taken.

Lectures—Two hours per week, to be arranged.

Reading and Laboratory work—Three hours per week, to be arranged.

The Miller Memorial Research Professor.

MINERALOGY

PROFESSOR—E. L. Bruce, B.Sc., M.A., Ph.D., F.R.S.C. ASSISTANTS—F. T. Joliffe, B.A., J. F. Henderson, B.Sc.

REGULATIONS

- 1. Students taking Mineralogy 1 must have matriculated in Chemistry or have passed in Chemistry 1 or take Chemistry 1 concurrently.
- 2. Students taking a Minor, a Major, or Honours in Mineralogy must include among their courses, besides the prescribed courses in Mineralogy itself, such courses in Geology, Chemistry and Physics as are necessary to secure proper preparation and balance. The details should be arranged in consultation with the Professor. Some of the requirements regarding courses in Geology to be included are stated below.
- 3. Mineralogy 1, 2, and 11, 12 or 13 must be taken in the order named and are prerequisite to all other courses in Mineralogy. The order in which the other courses are taken may be varied to suit the individual case. In special cases 2 and 11, 12, or 13 may be taken concurrently.
- 4. For a Minor a student will take Mineralogy 1, 2, one of 11, 12, 13, and Geology 1; for a Major a student will take Mineralogy 1, 2, two of 11, 12, 13, and Geology 1. For Honours a student will take five or six courses from one of the following groups, including Geology 1. Candidates making Mineralogy their main Honour subject must include course 99.
 - A. Mineralogy 1, 2, 11, 12, 15a, 16b and Geology 1.
 - B. Mineralogy 1, 2, 11, 13, 14, and Geology 1.
- 5. Students in Mineralogy are expected to take part in the two field excursions which are made during October and November.
- 6. Each student in the department is supplied with a locked cabinet containing about 150 mineral specimens.

COURSES OF INSTRUCTION

MINERALOGY 1.

A course in Elementary Crystallography, Blowpipe Analysis and Descriptive and Determinative Mineralogy of about 100 common or more important minerals together with practical work in their identification.

Prerequisite—Matriculation Chemistry or Chemistry 1, or Chemistry 1 taken concurrently.

Text-book: Ford, Dana's Manual of Mineralogy, 13th Ed.

Lectures: Tuesday at 10, Friday 2-4.
Professor Bruce and Assistants.

MINERALOGY 2.

- (i) OPTICAL MINERALOGY.
- (ii) PHYSICAL MINERALOGY AND CRYSTALLOGRAPHY.

An advanced course in the characters of crystals and crystal measurements.

Prerequisites-Mineralogy 1, Physics 1.

Lectures: Thursday at 10, Friday at 8, first term; Monday at 10, Friday at 10, second term.

Laboratory: Two hours a week, to be arranged.

Professor Bruce.

MINERALOGY 11. DESCRIPTIVE AND DETERMINATIVE MINERALOGY.

A course describing the properties, occurrence and uses of ore minerals.

Prerequisites-Mineralogy 1 and 2,

Lecture: Friday at 1, first term; Thursday at 10, second term. Laboratory: Tuesday, 1-3.

Professor Bruce and Mr. Jolliffe.

MINERALOGY 12. ADVANCED DESCRIPTIVE AND DETERMINATIVE MINERAL-OGY.

A course covering the rarer mineral species and mineral alteration.

This course will be offered in alternate years. It will alternate with Mineralogy 13. Offered in session 1929-30.

Prerequisites as for Mineralogy 11.

Lecture: Wednesday and Friday at 11;

Laboratory: Friday, 1-3.

Professor Bruce.

MINERALOGY 13. MINERAL TECHNOLOGY.

A study of alloy minerals, abrasives, refractory materials, fertilizers, building stones, gem stones, etc. This course deals chiefly with the occurrence and utilization of the non-metallic minerals. This course will be given in alternate years. Not offered in the session 1929-30.

Prerequisites, as for Mineralogy 11.

Lectures: Wednesday and Friday at 11. Professor Bruce. Laboratory: Friday, 1-3. Professor Bruce.

MINERALOGY 14. MINERALOGRAPHY.

The study of opaque minerals with the metallographic microscope Paragenesis of ores.

Lectures and Laboratory: Three hours per week, to be arranged.

MINERALOGY 15a. ADVANCED CRYSTAL STRUCTURE.

Lectures and laboratory work on the properties of crystals, in cluding minerals, artificial products, etc.

Lectures and Laboratory: Three hours per week, to be arranged.

First term. Professor Bruce.

MINERALOGY 16b. CHEMISTRY OF MINERALOGY.

A general survey of mineral density and of the processes involved in mineral deposition. A study of inversion phenomena, monotropy, enantiotropy, eutetics, solid solutions, etc., with their geological and technological significance.

Three hours per week, lectures and reading to be arranged.

Second term. Professor Bruce

MINERALOGY 99. READING AND SEMINAR COURSE.

An advanced course for Honour students making Mineralogy their main subject.

Professor Bruce.

GRADUATE COURSES

I. REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

- 1. Pre-requisite work. A candidate for the degree of Master of Arts must have taken the degree of Bachelor of Arts with Honours in two subjects in some preceding academic year.
- 2. Application. Application for permission to become a candidate for the degree of Master of Arts must be made to the Registrar. The applicant, if not a graduate of Queen's University, should send an official certificate giving full details of his previous academic training, including courses taken and grades received, together with a marked Calendar showing the content of the courses. He should also state in what field he desires to carry on his studies. The amount and distribution of work will be determined in each case by the Board of Studies on the basis of the general regulations contained in sections 3 and 4 below:
- 3. Character of the work. The degree of Master of Arts is given, not on the ground of general attainments, but in recognition of the candidate's wide knowledge of a special field of study. A candidate must ordinarily take advanced work in the two main subjects of his undergraduate Course. With special permission, however, he may concentrate on one of his special subjects or he may count work in a third related subject if it can be shown to belong to a consistent plan of study.

The work prescribed shall consist of the following:

- (a) Advanced lecture courses.
- (b) Directed special studies, with reports, essays, and conferences.

A thesis or other piece of independent work will be required from all candidates.

4. Amount of work. The work shall be the equivalent of four Honour courses beyond the standing required for the degree of Bachelor of Arts with Honours in two special subjects under the present system of studies. Those who do not qualify under this condition must complete such work as may be necessary to bring their standing to the level of B.A. with Honours in two subjects.

Those who have taken the degree of Bachelor of Arts with Honours in connection with the Special Course in Science for Teachers must bring

their standing in two subjects up to the required level before being admitted to the course for M.A.

- 5. Standing required. The degree of Master of Arts will be conferred upon a student who, having satisfied the conditions mentioned above, makes at least sixty-six per cent. in each of the prescribed courses.
- 6. Fees. The fees charged are the same as for undergraduate work. See FEES.
- 7. Attendance. The minimum attendance required of M.A. candidates is one year.

Departmental outlines of work that may be counted towards the degree of Master of Arts are given below:

Details of courses referred to by numbers will be found under the various Departmental announcements.

Latin

Lecture course: 100.

Directed special studies in Tacitus and Suetonius: 106.

Greek

Lecture course: 109.

Directed special studies in Greek Art and Archaeology and in Greek Philosophy and Religion.

German.

Lecture courses selected from 11a, 12b, 22a, 23b, 31a, 33b.

Directed special studies consisting of the option under German 99 not counted towards the degree of B.A. with Honours.

French.

Lecture courses: 100, 105, 110, and 115. If only one of these is chosen it must be 110 or 115; 30b is a pre-requisite, and if not taken for B.A. must form part of the M.A. work in French.

Directed special studies to be determined upon consideration of the candidate's previous Course.

Spanish

Lecture courses: Any courses numbered above 20.

Directed special studies based on:

- (a) Literatura Caballeresca.
- (b) Escritores Místicos Españoles.
- (c) Dramáticos contemporáneos a Lope de Vega.
- (d) Calderón considerado como dramático religioso.
- (e) Espronceda y la Sociedad Española de la Época Romántica.
- (f) Literatura del Siglo de Oro.
- (g) Autores Modernos.

English.

Lecture courses: 17a, 18, 20b, 22a, 24b, 28, 35a, 36b, 45a, 46b.

Directed special studies in one of the following:

Beowulf, English Prosody, Marlowe and Jonson, the Elizabethan Lyric, Sir Walter Scott, Browning and Tennyson, Thomas Hardy, Canadian and American Literature.

History.

Courses are open in three fields of history:

- A. EUROPEAN HISTORY. Courses 12, 14a, 15b.
- B. British History. Courses 16, 18a, 19b.
- C. CANADIAN HISTORY. Courses 20a, 21b, 25, 30a, 31b.

Candidates for the Master's degree may, at the option of the instructor, be required to do additional work to that prescribed for undergraduates enrolled in the same course.

Such of these courses in Canadian History as shall be offered at the Canadian Archives at Ottawa in the summer may with advantage be taken there instead of at the University in the winter.

Directed Special Studies shall be pursued by each candidate upon a topic selected in one of these three fields. Upon the topic a thesis shall be written based in large measure on original sources.

Political and Economic Science.

Lecture courses: A selection from the following courses: 10, 16b, 28b, 30, 32.

Directed special studies in The Government of Canada, in Canadian Economic History, or in Problems in Banking, Trade or Finance.

Seminar courses offered in Honour B.A. prescription: 90, Contemporary Political Theory; 91, Business Cycles.

Philosophy.

Lecture courses: Candidates should, after consultation with the department, choose courses from those numbered 25, 27, if not already taken, 28, 29, 44, 48, 99.

Directed special studies: Candidates should, with the advice of the Department, select a field of work having a certain unity of interest, and their special subject for private study should be within this field.

Mathematics-

Lecture courses: Any of the half-courses numbered from 20 to 34.

Directed special studies: Certain half-courses from 20 to 34 may be taken in the form of directed special studies, as advised by the Department and approved by the Board of Studies.

Physics

Lecture courses: A minimum of three lectures a week on topics selected from half-courses 27 to 34.

Directed special studies: Physics 35.

Chemistry

Lecture courses: Two full courses selected from 101b, 121, 106b, 145, 141, 171a.

Thesis and directed special studies selected from 201, 221, 231, 241, 261, 271.

Biology

Lecture courses to be selected in consultation with the Head of the Department from 15a, 18, 20, 24, 26, 27, 30, 31, 32b, 33, 34. By arrangement with the Departments concerned, some courses in Bacteriology may be substituted for courses in Biology.

Directed special studies in continuance of work already begun.

Geology

Lecture courses: 13 and 19 for those who have covered Honour Group A; or 10 and 15 for those who have covered Honour Group B. See section 4 of the Departmental Regulations.

Directed special studies in one of the fields of paleontology, stratigraphy, petrography, or petrology.

Mineralogy

Lecture courses: Two courses to be chosen from courses 11-16. By special arrangement certain courses in Geology may be substituted. See section 4 of the Departmental Regulations.

Directed special studies along one of the general lines of Group A or Group B, with Thesis.

II. REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

- 1. Pre-requisite work. Students who wish to begin a Course in the Faculty of Arts leading to the degree of Doctor of Philosophy must have the degree of Bachelor of Arts with Honours or equivalent standing. Those intending to do their work in Queen's Theological College must have the degree of Bachelor of Divinity.
- 2. Application. Application for permission to become a candidate for the degree of Doctor of Philosophy must be made to the Registrar. The applicant, if not a graduate of Queen's University, should send an official certificate giving full details of his previous academic training,

including courses taken and grades received, together with a marked Calendar showing the content of the courses. He should also state in what field he desires to work. The Standing Committee, after satisfying itself as to the ability of the candidate to proceed, will prescribe a suitable Course.

3. Character of the work. The degree of Doctor of Philosophy is given not on the ground of long and faithful work, but in recognition of a candidate's mastery of some particular field of study and of his power to offer original treatment of a fitting subject or to carry on original research.

The candidate's mastery of his field will be tested by examination and his ability to handle a problem by a thesis.

- 4. Field of Study. The Course shall consist of a unified programme of study ordinarily not involving work in more than two Departments, and shall be approved by the Standing Committee.
- 5. Thesis. The subject of the Thesis must be approved at least one year before the date of the Final Examination. Not fewer than three typewritten copies must be submitted one month before the date of the Final Examination, together with a Summary. The Thesis must be accepted by the Examination Board before the candidate can proceed to the Final Examination.

A candidate shall ordinarily be required to publish his thesis, either separately or in a learned journal, though in special cases the publication of a summary of the results obtained may be accepted.

- 6. Allowance for M.A. work. The degree of Master of Arts shall count towards the degree of Doctor of Philosophy both as regards work and residence to an amount to be determined by the Standing Committee.
- 7. Language requirements. At least one year before the Final Examination candidates who have not passed French 2 and German 2, or their equivalents, must satisfy the Standing Committee of their ability to make satisfactory use of these two languages. A department may, however, subject to the approval of the Standing Committee, require in place of French or German some other modern language.
- 8. Period of study. The minimum length of the Course shall be three years from the degree of Bachelor of Arts with Honours or its equivalent.
- 9. Residence. The minimum graduate residence required at the University is the equivalent of one full session. No candidate will be allowed to pursue any part of his Course away from the University

unless he can satisfy the Standing Committee that he has proper facilities for study and research.

10. Examinations. Written examinations, or other written tests, will be conducted at the end of each session in which a candidate is registered. A candidate may at any time be requested to discontinue his Course.

The Final Examination will be on the whole field of the candidate's study. It will be held at the University on a date fixed by the Standing Committee and will be oral, though a written test may be required in addition.

The Standing Committee shall appoint an Examination Board consisting of the members of Staff of the Departments concerned, together with not fewer than two representatives from other Departments.

- 11. Regulations Retroactive. Candidates who have already registered for the degree of Doctor of Philosophy shall be required to comply with all regulations introduced after the date of their first registration, unless the Standing Committee consider that this will entail undue hardship.
 - 12. Fees. The fees shall be as follows:
 \$10 for each Session's registration.
 \$10 for each Session's examination.
 \$100 for tuition for the whole Course.
 \$50 on graduation.
 Laboratory fees additional.

The following outlines indicate the nature of the work required by the Departments that offer courses leading to the degree of Doctor of Philosophy:

Greek

Candidates in Greek will receive direction in a group of studies, including the general literary history of the classical period, a survey of art and archaeology in Greek lands, and extended reading in poetry and philosophy. Special work will be arranged, if desired, covering part of the Hellenistic age, so as to suit those who may be interested in the society and culture of the eastern Roman provinces and in Christian origins.

Germanics

The course in Germanics presupposes a ready and an accurate command of literary High German, both written and oral-

The work is divided as follows:

A

- 1. A general and connected knowledge of the cultural and political history of Germany.
 - 2 A general knowledge of the history of German literature.
- 3. A general knowledge of the history of the Germanic languages, more particularly of German, with a reading knowledge of some of the principal literary monuments of Gothic, Old High and Middle High German and Scandinavian (Swedish, Dano-Norwegian) and Netherlandish.

B

- 1. A special knowledge of the period of German literature from 1750 to 1832, with particular reference to Lessing, Herder, Goethe, and Schiller, and their principal works.
- 2. A detailed study of any other restricted period of German literature from which the subject of the dissertation is taken.
- 3. A dissertation indicating independence of research and originality of treatment taken from any period and subject of German literature or of the German language.

History

A. CANADIAN HISTORY.

The attention of candidates for the doctorate in History is called to the outline of work given above for the degree of Master of Arts.

The following is the scope of the field of study:

- (a) A history of French institutions transferred to Canada during the French period (see prescription for History 20a).
- (b) The history of Canada after 1763, studied throughout from first-hand printed sources.
- (c) The development of British colonial theory and practice from Edmund Burke.
- (d) Detailed study from first-hand manuscript and printed authorities, preferably at the Dominion Archives, of a special subject to be fixed in consultation with the Professor of History. On this subject a thesis will be written and a bibliography compiled.
- (e) In the final examination the candidate's knowledge of British law and institutions founded on Erskine May's Constitutional History of England will be tested.

The Department of History has arranged research work in Canadian History to be conducted by lectures and seminars during the months of July and August at the Dominion Archives. Ottawa.

B. MEDIAEVAL HISTORY.

Provision will be made for research in The Later Middle Ages and the work done will count towards the degree of Ph.D. in Church History.

Political and Economic Science

The course prescribed for candidates for the degree of Ph.D. who are taking a substantial part of their work in the field of Political and Economic Science will in all cases include advanced study of Economic and Political theory, and the study of one or more of the following fields, including special investigations, under the direction of members of the Department, into their Canadian aspects: Economic History, Public Finance, Private Finance, the Labour Movement, Comparative Government, Constitutional and International Law, Imperial Relations.

Philosophy

Candidates will, in consultation with the Department, select their work in one field of study, e.g., Logic, Ethics, Ancient Philosophy, Child Psychology. They will be required to show knowledge of the history of their selected subject and a more detailed knowledge of certain standard works to be read in the original language. The subject of their thesis should be related to their field of study.

Physics

The work will consist of advanced lecture courses, prescribed reading of standard works on Physics and of experimental work in the laboratory. This experimental work will be on some subject for original investigation. The candidate will be at all times under the direction of members of the staff to whom he may come for assistance.

QUEEN'S THEOLOGICAL COLLEGE.

Queen's Theological College offers courses for the degree of Doctor of Philosophy in Old Testament Language and Literature, New Testament Language and Literature, Systematic Theology, Philosophy of Religion, and Church History. Outlines are given in the Calendar of the Theological College.

DEGREES, MEDALS, SCHOLARSHIPS, AND PRIZES,

1928

DEGREES

HONORARY DEGREES

HONORARY DEGREES
Degree of LL.D.
Burrell, Hon. Martin
C.B.E
Degree of D.D.
Fraser, Rev. J. R., M.A
DEGREES BY EXAMINATIONS
Degree of D.Paed.
Tuck, J. R., B.A
Degree of M.A.
Aspinall, Daisy E., B.A
Degree of B.A. (with Honours)
Abernethy, Mary G. (English and History) Kingston, Ont. Adams, G. A. (Chemistry and Biology). Watford, Ont. Anglin, Marion P. (Spanish and French) Kingston, Ont. Barrington, Florence G. (Latin and Greek) Russell, Ont. Baxter, J. M. (Chemistry and Biology). Grimsby, Ont. Bearder, R. Gwendoline (Spanish and Ottawa, Ont. French). Berlanguet, Mary J. (English and French) Sudbury, Ont. Boyd, E. M. (Chemistry and Biology). Kingston, Ont. Browne, Maxine H. (English and History) Ottawa, Ont. Carmichael, Elizabeth M. (English and French). Caverhill, Ethel J. (Biology and Geology). Mount Elgin, Ont. Common, Sarah (Economics and Mathe-

matics) Melville, Sask.	
Cooper, D. A. (Mathematics and Physics). Parkhill, Ont.	
Culbert, G. (English and History)Netherhill, Sask.	
de Mille, Betty M. (French and English), Calgary, Alta.	
de Mille, Betty M. (French and English)Calgary, Alta. Dyde, Dorothy F. (English and French)Kingston, Ont.	
Ellis, D. M. (Mathematics and Physics), Pembroke Ont.	
Falconer D R (English and History) Winning Man	
Ferguson, Marion C (English and History) Brockville Ont.	
Ellis, D. M. (Mathematics and Physics)Pembroke, Ont. Falconer, D. R. (English and History)Winnipeg, Man. Ferguson, Marion C. (English and History) Brockville, Ont. Flockhart, Margaret (German and French) Sault Ste. Marie, Ont.	
Cilharla D. E. (English and History) D. D. A. Darras anvilla O.	
Gilbank, P. E. (English and History)R.R. 4, Bowmanville, O	111
Graham, Alma J. (English and History)Kingston, Ont.	
Graves, Dorothea C. (English and History) Kingston, Ont.	
Hale, R. L. (English and History) Sault Ste. Marie, Ont.	
Hall, E. R. S. (Biology and Chemistry)Orton, Ont.	
Hammett, J. W. (Economics and History). Newbury, Ont.	
Harkness, Kathleen M. (Biology and	
Chemistry) Kingston, Ont. Harrison, R. Alberta (English and Hist'y) Uxbridge, Ont.	
Harrison, R. Alberta (English and Histy) Uxbridge, Unt.	
Hawkins, R. C. (Chemistry and Biology)Smith's Falls, Ont.	
Haydon, A. S. (Economics and History) .Ottawa, Ont. Henderson, Annie C. (Latin and Greek) Williamstown, Ont.	
Henderson, Annie C. (Latin and Greek) Williamstown, Ont.	
Hocking, W. J. (Science)	
Hogg, Marion B. (Science) Walkerton, Unt.	
Horan, Joanna C. (English and History). Seaforth, Unt.	
Houze, Mary (German and French) Lombardy, Ont.	
Hughes, I. W. (Science)	
Hunter, Grace J. (English and French) Spencerville, Ont.	
Ingram, J. C. (Economics and History), Wolseley, Sask.	
Irwin, N. A. (Science)	
Longwell, D. Muriel (English and History) Toronto, Ont.	
Melville, Margaret M. (Science)Cardinal, Ont.	
Milhausen, A. J. (Science)Walkerton, Ont.	
Montgomery, Edith D. (Latin and Greek). Smith's Falls, Ont.	
Muir, R. (Science)Glenannan, Ont.	
Mulligan, H. A. (Mathematics and	
Physics)	
Munro, Gladys R. (English and French), Gananogue, Ont.	
Murphy, H. E. (English and History) Arnprior, Ont.	
McDonald, Marjorie F. M. (Mathematics	
and Physics) Peterborough, Ont. McEachern, E. C. (English and Latin) Regina, Sask.	
McEachern, E. C. (English and Latin)Regina, Sask.	
McElroy, Annie B. (Economics and His-	
tory)Watford, Ont.	
McGillivray, M. Marion (English and	
French) Alexandria, Ont.	
McLennan. J. L. (Economics and History) Lindsay, Ont.	
McLeod, N. I. (Economics and History)Kingston, Ont.	
MacQuarrie, Amy P. (Mathematics and	
Physics) Bracebridge, Ont.	
Oswald, Alice L. (English and History)Lindsay, Ont.	
Patterson, J. W. (Latin and Greek)Ayr, Ont.	
Paul, M. Adalene (English and French)Kingston, Ont.	
Paul. P. Inez (Latin and Greek)Kingston, Ont.	
Prittie, E. Agnes (English and French) Chateauguay Basin, P.G.	2.

Prunner, G. S. (Mathematics and Physics) Morrisburg, Ont. Roberts, Evelyn J. (History and English) Kingston, Ont. Roberts, Mabel E. (English and History). Brockville, Ont. Robertson, G. D. (English and History)..R.R. 2, Petrolea, Ont. Rorabeck, Winnifred L. (French and

Simmons, M. Elizabeth (English and His-

......Kingston, Ont.

Degree of B.A. (Pass)

Allan, G. R.	Hamilton, Ont.
Arkinstall, W. C	R.R. 2, Dunvegan, Ont.
Banks, O. H	
Barnes, R. R	Ottawa, Ont.
Barry, Bessie W	
Brophey, T. R	
Byers, W. J.	
Cameron, J	
Carbert, R. H	
Charlesworth, A. M	
Cohen, H. A	
Crewson, Ruby M	
Davis, W	
Dimma, R. E	Markham. Ont.
Doyle, H. Loretto	Stoco. Ont.
Duffield, A. E	Tribune, Sask.
Eamon, Gladys M	
Ebersole, E. O	
Elborn, H. E	·· London, Ont.
England. W. R	Kingston, Ont.
Fisher, C. M	·· Cannington. Ont.
Fletcher, T	
Gillson, H. T	Montreal. P.Q.
Glenn, E. H	Mimico, Ont.
Gordon, D. B.	Agincourt, Ont.
Halpenny, H. L	Kingston, Ont.
Hamilton, Jean C	Moose Jaw. Sask.
Hanniwell. C. D	Niagara Falls, Ont.
Holland, Eleanor M	Kingston. Ont.
Hood, Marion J	···Ottawa. Ont.

T. J. M. T. D	Dambarda O t
Jackson, May B Jones, C. L	Carrying Place, Ont.
Keenan, Mary M	
Knapp, Mrs. Gertrude M	.R.R. 1. Fonthill. Ont.
Knight, D. Marion	.Picton, Ont.
Little, Walter	
Lowe, H. H	Ashton Station, Ont.
Martin, Madge A	. Moose Jaw, Sask.
Massey, Stella V	. Morganston, Ont.
Mitchell, W. J	.Brantford, Unt.
Morris, Clara	Kingston, Ont.
Mullett, M. Irene	.Carleton Place, Ont.
Munro, Verna D	Ottawa, Ont.
Macdonald, A. H.	. Vancouver, B.C.
McDowell, Rena S. Macfarland, M. T.	Ottawa Ont.
McKillop, Annabelle	. West Lorne, Ont.
McKnight, E	. Sydenham. Ont.
MacLeod, Grace K.	Dalkeith, Ont.
McLeod, Jean	Arnarior Ont
McNab, M. C.	Renfrew. Ont.
McRae, N. A	. Dunvegan, Ont.
O'Brien, R	. Pembroke, Ont.
Patterson, H. B	.Kingston, Ont.
Pattison, Wilma A	.Tweed, Ont.
Pelletier, Anna M. (Sister St. Dominica)) Kingston, Ont.
Pelton, G. M	Ottawa, Ont.
Phillips, F. S	Wingham. Ont.
Robertson, Jennie L	
Robins, H. F.	Okotoks, Alta.
Rose, Beatrix F	.Ottawa, Ont.
St. John, Ina R.	. Jeancaster. Ont.
Saundercook, Lola M	. Kingston, Ont.
Scott, Katharine L	. Hartford, Conn.
Shaver, M. R. Simmie, Jean A. Simmie, Jean A.	Brantford, Ont.
Simmons, M. Elizabeth	. Kingston. Ont.
Smith, C	. Kitchener, Ont.
Smith, T. C. H	. Weston, Ont.
Speight, Aimee G	Toronto, Ont.
Spencer, T. M. Stark, J. S. Stark, J. S. Stark, J. S. Stark, J. S. Stark, J.	Finch Ont.
Steele, Ethyl M	. Keene, Ont.
Taylor, J. B	
Tervo, Esther F	Victoria, B.C.
Tett, Eleanor H	. Newboro. Ont.
Thompson, R. H	Hamilton. Ont.
Trenouth, S. M	· wattord, Unt.

Wakely, Carrol S	Ottawa, Ont.
Walker, Mary H	
Walters, Mildred K	Toronto, Ont.
Wilson, A. D	Enterprise, Ont.
Wilson, Elnora E	Ottawa, Ont.
Wiseman, R. T	Collingwood, Ont.

Degree of B. Com.

Barnett, R. A	Stettler, Alta.
Beech, Erma F	Winchester, Ont.
Breckon, Isabel	
Butler, B. C., B.A.	
Buttrum, Mary L	
Cook, W. F.	
Day, G. H	
Delaney, E. C.	
Ehmann, W. J. E	
Fell, J. M	····Gore Bay, Ont.
Green, L. C	····R.R. 4, Paris, Ont.
Hopkins, J. W., B.A	····Erinsville, Ont.
Little, William	Toronto, Ont.
Mayor, A. A.	
May, A. L	
Miller, T. L.	
Molter, J. P.	
Mutter, J. L., B.A	
McCallum, D., B.A.	
McDougall, W. L	
McLennan, C	La Vallee, Ont.
McNab, A. S., B.A	Douglas, Ont.
Peacock, A. H.	
Rowland, Mary K. N., B.A	
Saunders, J. A	
Stone, W. D.	
Welsh, R. S., B.A.	Foronto, Ont.

Degree of B.D.

Larter, W. S. A.Big Rapids, Mich.

SCHOLARSHIPS AND PRIZES

History but later by reversion to
F. F. Smith, Ottawa, Ont.
W. M. O. Lochhead Scholarship in Economics 1Arthur E. Morton,
Richmond, Ont.
Adam Shortt Scholarship in Economics 2A. G. Baker, Lombardy, Ont. P. D. Ross Scholarship in CommerceW. F. McIlroy,
Hamilton, Ont.
Alexander Laird Scholarship in English 1.F. C. Biehl,
New Dundee, Ont.

Maclennan Scholarship in Greek 2Beatrice Clendinnen,
N. F. Dupuis Scholarship in Mathematics 1.R. L. Way, Kingston, Ont. William Moffatt Scholarship in Chemis-
try 1
Robert Bruce Scholarship in ArtsGeorgina M. Shirley,
Oshawa, Ont. Later given by reversion to Graeme Falkner,
Graeme Falkner,
Ogdensburg, N.Y. Arts '15 ScholarshipJames Cosgrove, Richmond Hill Ont
Greek A, 1st PrizeW. H. Showman,
Greek A, 2nd PrizeE. L. Beech,
Mary Fraser McLennan Prize in Hebrew. Verne E. R. Zufelt,
Oshawa, Ont. Prize in French 2J. W. DeCeuleneer,
Shawinigan Falls, Que. Prize in Spanish 1
James C. Rogers Prize in English 2Helen Hubbs, Picton, Ont.
McIlquham Foundation in EnglishFrank H. Rand, Regina, Sask.
Gowan Foundaiton No. IAlberta Harrison,
Gowan Foundation No. II (Biology)Christine Rice, Perth, Ont. Gowan Foundation No. III (Political Sci-
Gowan Foundation No. III (Political Science)
Curtis Memorial ScholarshipF. S. Phillips, Wingham, Ont.
Sir Wilfrid Laurier Memorial Scholarship
in French ConversationRena L. Fennell, Grand Valley, Ont.
ACTION A.T. G.
MEDALS
Medal in Latin
Medal in French
Medal in English
Arnprior, Ont. Medal in HistoryAlice Oswald, Lindsay, Ont.
Medal in Economics
Medal in MathematicsG. S. Prunner,
Medal in Physics
Medal in Chemistry
Medal in BiologyM. W. Smith, Burford, Ont.

FELLOWSHIPS

Value \$500.

ARTS RESEARCH FELLOWSHIPS—	
G. S. Prunner (Mathematics and Physics)	
Morrisburg, OntValue	\$500.
M. W. Smith (Chemistry and Biology)	
Burford, OntValue	\$500.
Annie C. Henderson (Classics)	0050
Williamstown, OntValue	\$250.
J. W. Tait (History and Economics) St. John, N.BValue	6050
H. E. Murphy (English and History)	φΔυυ.
Arnprior, Ont	\$250.
Marjorie F. M. McDonald (Mathematics	φ
and Physics), Peterboro, OntValue	\$250.
Sir James Aikins Fellowship in Canadian	
SIR JAMES AIKINS FELLOWSHIP IN CANADIAN	
HISTORY-	

Alice Oswald, Lindsay, Ont.





